YAMAHA PORTATONE
PSR-6700

Advanced Features
Spielfunktionen
Fonctions avancées
Características avanzadas

YAMAHA PORTATONE
PSR-6700

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The Function Buttons

The PSR-6700 has 13 functions buttons — [F1] through [F13] —that select single or multiple display "pages" of parameters. Here's a list of the function buttons and the manual page numbers on which the functions are described in detail.

[F1]: Sequencer 4
[F2]: Custom Accompaniment Programmer 17
[F3]: Custom Voice Edit 27
[F4]: Effect/Reverb Type 34
[F5]: Harmony Type 35
[F6]: ABC Mode 36
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[F10]: Transpose/Tune 40
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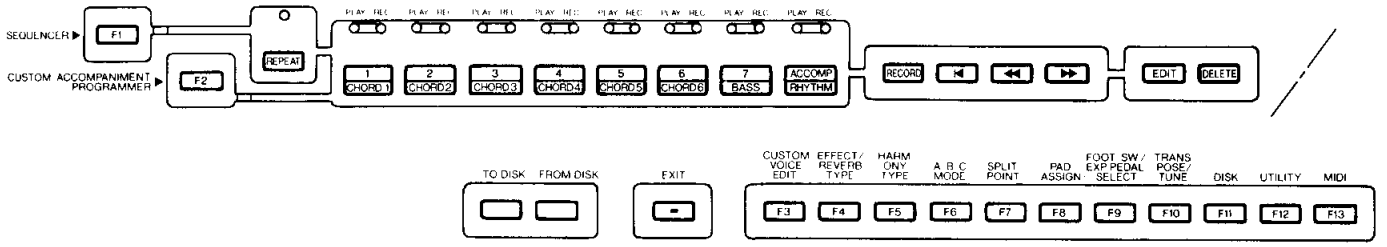
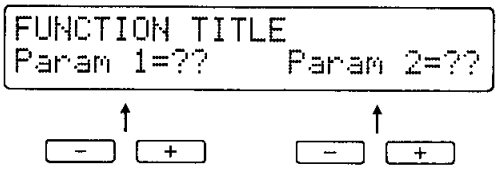


General Function Selection & Editing Procedure

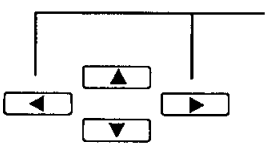
If a function button accesses only one or two parameters, only a single display page will be required. — [F10] TRANSPOSE/TUNE, for example — then simply pressing the function button calls the required display page. In other cases — [F2] CUSTOM ACCOMPANIMENT PROGRAMMER, for example — several display pages may be provided. These are accessed by using the [▲] and [▼] buttons. Furthermore, in some cases a display page have more parameters than fit in a single screen. The different screens are accessed by using the [◀] and [▶] buttons.

Each display screen will have a maximum of two parameters, and these can be adjusted by using the [-] and [+] buttons immediately below each parameter. Pressing both the [-] and [+] buttons simultaneously will generally set the "normal" value for the selected parameter.



These buttons set the left parameter.

These buttons set the right parameter*.



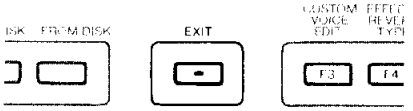
The left and right arrows select other parameters within the same page (if available).

The up and down arrows select different display "pages."

** Some functions have only one parameter which will be shown to the left of the display. In such cases the right [-] and [+] buttons will have no effect.*

The [EXIT] Button

The [EXIT] button can be used at any time to exit from a function and return to the normal play mode.



[F1] SEQUENCER

The PSR-6700 features a 8-track sequencer that allows you to record and play back original musical creations — along with auto accompaniment if required. You can record the accompaniment and orchestra parts separately or at the same time. If, for example, you record the accompaniment first and then record your own performance while listening to playback of the accompaniment, you're free to use the entire keyboard for your performance rather than being limited to only the upper keyboard area. You can also play back each part independently or in any combination. For even further versatility, the PSR-6700 sequencer allows different songs to be saved to or re-loaded from floppy disk.

Sequencer & Sequencer Edit Mode Functions

The functions listed below are available in the Sequencer and Sequencer Edit modes. Refer to the page numbers in parenthesis for details on the corresponding functions.

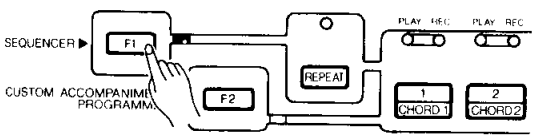
[F1] Button → Sequencer Mode

1. SEQUENCER — Recording ..... (5)
Deleting Tracks ..... (7)
Playback ..... (8)
Repeat Playback ..... (8)
2. VOLUME ..... (9)
3. RECORDING TYPE ..... (9)
4. CONDITION ..... (10)

[EDIT] Button → Sequencer Edit Mode

E1. MIXDOWN ..... (11)
E2. QUANTIZE ..... (12)
E3. DELETE ..... (12)
E4. INSERT ..... (13)
E5. ERASE ..... (14)
E6. REMOVE EVENT ..... (14)
E7. VELOCITY MODIFY ..... (15)
E8. NOTE SHIFT ..... (16)
E9. SONG CLEAR ..... (16)

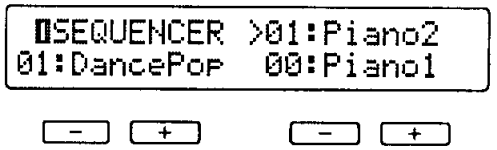
Recording



1. Engage the Sequencer

Press the [F1] SEQUENCER button to engage the sequencer. "F1" will appear on the TEMPO display and "SEQUENCER" will appear on the top line of the LCD display.

Sequencer Display Page 1.



- If the sequencer contains previously recorded data, the green PLAY indicators of tracks containing data will light when the sequencer is engaged. Any of these tracks can be muted prior to engaging the record-ready mode (below) by pressing the corresponding track button so that the green PLAY indicator flashes.

NOTE: If you intend to record the accompaniment track, the Interactive Accompaniment and Auto Solo functions should be turned off before engaging the sequencer mode.

2. Set Up All Record Parameters

Select the accompaniment style you want to record with, voices, orchestration, harmony, and other parameters before actually beginning recording. A list of the parameters that can be recorded by the PSR-6700 sequencer is given below.

You may also need to select a specific record mode and other conditions accessible via the sequencer's "3. RECORDING TYPE" and "4. CONDITION" parameters, described on pages 9 and 10.

Recordable Parameters

Tracks 1 — 7

- Note on/off
- Pitch bend
- Modulation
- Sustain on/off
- Orchestra 1 & 2 volume
- Voice change (including custom voice on/off)
- Tempo
- Keyboard percussion on/off
- Glide on/off

Accompaniment Track

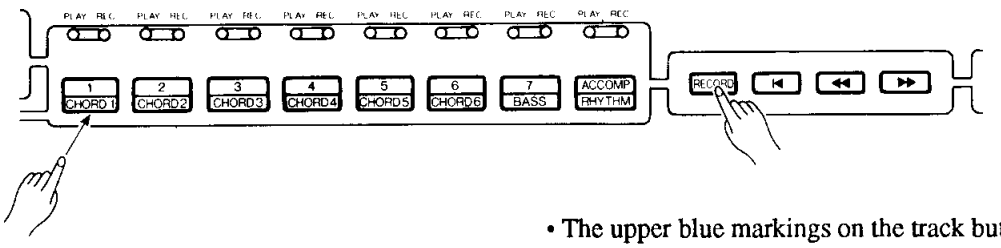
- Chord & root (note on/off in manual bass mode)
- Style change
- Rhythm volume
- Bass volume
- Chord 1 volume
- Chord 2 volume
- Tempo
- Reverb on/off & depth
- Reverb type
- Effect on/off & depth
- Effect type
- Harmony on/off & type
- IA on/off
- IA section & solo on/off
- IA level & sensitivity
- IA auto solo on/off
- ABC mode
- Pad custom number
- Synchro break on/off
- Manual bass on/off
- Intro, fill in & ending
- Pad on/off with on velocity (Pad 1- 8)

NOTE: When the sequencer mode is engaged the panel settings previously recorded in the sequencer are recalled.

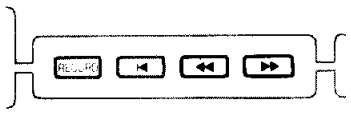
3. Select the Record Track(s)

ABC accompaniment can only be recorded on the ACCOMP. track. The ORCH.1 and ORCH.2 voices can be recorded on any of the remaining 7 tracks, but only one of these tracks can be recorded at a time if the normal ORCH.1 orchestration is selected. If the ORCH.2+1 or ORCH.2◀▶1 orchestration is selected, two record tracks must be selected — the ORCH.1 voice will be recorded on the lower-numbered track while the ORCH.2 voice will be recorded on the higher-numbered track. This means that a maximum of three record tracks can be specified when the ORCH.2+1 or ORCH.2◀▶1 orchestration is selected: ACCOMP. and any two numbered tracks.

To select the record track(s) and engage the record-ready mode, hold the [REC] button and press the appropriate track button(s). The red REC indicator for the tracks will flash. Also note that the AUTO BASS CHORD indicator will light automatically when the ACCOMP. track is selected.



- The upper blue markings on the track buttons apply when the SEQUENCER mode is engaged (1 through 7, and ACCOMP.). The lower green markings when the CUSTOM ACCOMPANIMENT PROGRAMMER described on page 17 is operating.



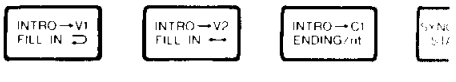
** If you are adding new material to tracks that have already been recorded, the [◀◀] and [▶▶] buttons can be used at this point to move to any measure number from which you want to begin recording. The [◀◀] and [▶▶] buttons will not function once recording has been started.*

4. Start Recording

Recording will start as soon as the [START] button or any key on the keyboard is pressed.

If the ACCOMP. track is selected and you start recording by pressing the [START] button, only the rhythm will play until the first chord (FINGERED or SINGLE FINGER) is played on the left-hand section of the keyboard.

If you start recording by playing on the right-hand section of the keyboard, neither the rhythm or ABC accompaniment will begin until a key is played on the left-hand section of the keyboard.



- Before starting recording you can also choose an introduction by pressing any of the [INTRO.] buttons.

NOTE: *Previously recorded fill-ins may not always be erased if that section is re-recorded or deleted.*

5. Play

Play the accompaniment and/or orchestra parts. The current measure number is shown on the TEMPO display as you record.

6. Stop Recording

Press the [STOP] button to stop recording immediately, or the [ENDING/rit.] button to finish off the recording with an appropriate ending. The first measure of the sequence is automatically selected when recording is stopped.

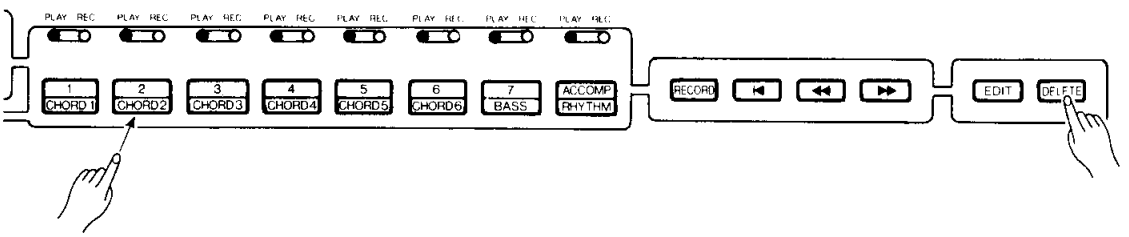
7. Record a New Track

To record a new track, simply select the new record track as described in step 3, select a new voice and other parameters as required, then record. All previously recorded tracks will automatically be set to the PLAY mode so you can record the new material while listening to the material you've already recorded. Repeat this procedure until your sequence is complete.

NOTE: Material recorded using the PSR-6700 sequencer will be erased when the power is turned OFF, even if the UTILITY mode MEMORY BACKUP function is turned on. If you want to keep sequences that you've recorded, use the "TO DISK" function described on pages 41 and 43 to save your sequences to floppy disk.

Deleting Tracks

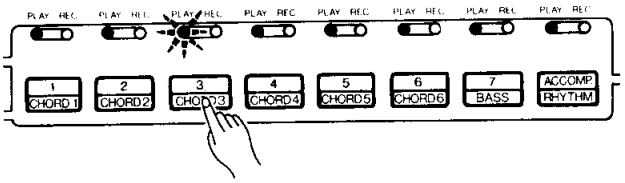
If you make a mistake while recording or simply want to delete a track from your sequence, press the track button corresponding to the track you want to delete while holding the [DELETE] button.



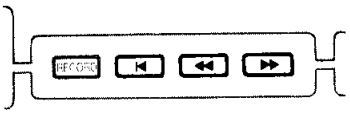
Playback

1. Start Playback

Since tracks are automatically set to the PLAY mode once they have been recorded, and tracks containing data are automatically set to the PLAY mode when the sequencer is initially engaged by pressing the [F1] button, all you have to do to play back a sequence is to press the [START] button or play any key on the keyboard.



- Any of the PLAY tracks can be muted before or during playback by pressing the corresponding track button. The PLAY indicator will flash when a track is muted. Normal playback can be restored by pressing the track buttons of muted tracks a second time (the PLAY indicator will light continuously).



- Before starting playback you can use the [◀◀] and [▶▶] buttons to move to any measure number from which you want to begin playback. The [I◀] button goes directly to measure number 1.

2. Play along If You Like

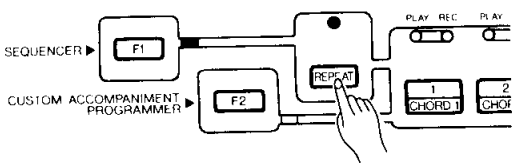
You can play along with the sequence using the entire PSR-6700 keyboard, selecting different voices and changing the tempo as required (subsequent recorded tempo changes will still take effect).

Parameters That Can Be Changed During Playback

- Style select (styles with different time signatures cannot be selected)
- Volume (rhythm, bass, chord 1 & chord 2)
- Tempo
- Reverb & effect on/off
- Synchro break
- IA on/off, section & solo on/off
- Pad custom number
- Synchro break on/off
- Pad on/off

3. Stop Playback

Playback will stop automatically when the end of the sequence is reached. You can also stop playback at any time by pressing the [STOP] button.



● Repeat Playback

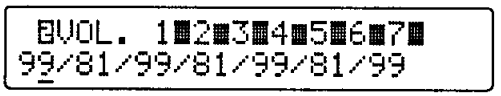
If you press the [REPEAT] button so that its indicator lights and then playback a sequence, the sequence will be repeated until the [STOP] button is pressed. Press the [REPEAT] button again to turn off the repeat function.

Other Sequencer Functions

As described at the beginning the this manual (page 3), the following sequencer functions are accessed by using the [▲] and [▼] buttons, while the various display screens provided by each function are accessed by using the [◀] and [▶] buttons.

2. VOLUME

Sequencer Page 2



■ Purpose:

This page lets you independently set the playback volume of each of the sequencer's seven orchestra tracks.

■ Procedure:

Use the [◀] and [▶] buttons to position the cursor at the volume parameter of the track you want to adjust (1 through 7, from left to right), then use either the left or right [-] and [+] buttons to set the volume to a value between "00" (minimum volume — no sound) and "99" (maximum volume). Vertical bar-graphs to the right of each track number on the top line of the display provide a graphic representation of the track volume levels.

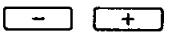
■ Notes:

Only tracks that contain data are available for volume control.

Any recorded volume changes will take priority over these settings.

3. RECORDING TYPE

Sequencer Page 3



■ Purpose:

Selects the Replace, Overdub, or Punch record mode.

■ Procedure:

Use the left [-] and [+] buttons to select the Replace, Overdub, or Punch record mode:

- **Replace**

  If replace recording is selected, any previous data on the track being recorded will be erased and replaced by the new material.

- **Overdub**

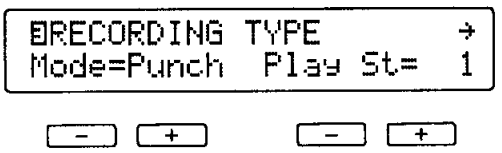
  If overdub recording is selected, previous material on that track will be retained and the new material will be added to it.

- **Punch**

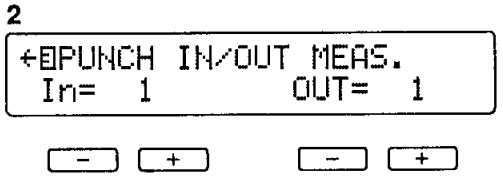
  Punch-in recording allows a specified measure or range of measures to be re-recorded (replaced) without affecting previously recorded material before and after the punch-in range.

  When the Punch mode is selected you must also specify the measure from which playback is to begin prior to the "punch-in" point at which recording will actually begin (Play St), the punch-in measure from which recording is to begin (In), and the punch-out measure at which recording is to end (Out). Use the [◀] and [▶] buttons to switch between the two display screens, and the associated [-] and [+] buttons to specify the required measure numbers.

1



2



■ Notes:

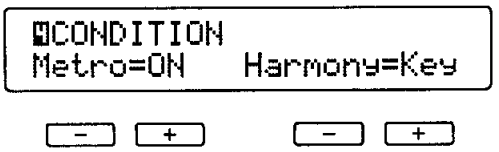
It's generally convenient to set the "Play St" measure in the Punch mode to just a few measures before the punch-in point. This allows you to get the feel of the music and prepare to start playing at the punch-in point. You can even play along with the material prior to the actual punch-in point so you'll flow naturally into the punch-in recording range.

A footswitch (the supplied FC-5 footswitch can be used) plugged into the rear-panel FOOT SW jack can also be used to punch-in and punch-out when the footswitch "Punch In" function is selected via the "FOOT SWITCH SELECT" function described on page 39. With the sequencer running in the Punch Record mode, press the footswitch at the point you want to begin recording (i.e. to "punch in"), and again to stop recording (punch out).

Please note that the punch-in record function can only be used on tracks that already contain recorded material.

4. CONDITION

Sequencer Page 4



■ Purpose:

This display page allows the recording metronome sound to be turned on or off, and determines whether harmony will be applied to the keyboard or track-1 part.

■ Procedure:

Use the left [-] and [+] buttons to turn the metronome on or off, and the right [-] and [+] buttons to select the harmony part — "Key" or "Tr1".

■ Notes:

The metronome sound only appears during recording when no rhythm is playing.

When the "Key" harmony setting is selected, harmony will be applied to notes played on the keyboard. If the "Tr1" harmony setting is selected, harmony will be applied to the track-1 part.

Sequence Editing

The PSR-6700 sequencer edit mode offers a range of functions that let you modify the recorded data in a number of ways.

Press the [EDIT] button while the sequencer is engaged to enter the sequencer edit mode. When you're finished editing press the [EDIT] button again to return to the sequencer.

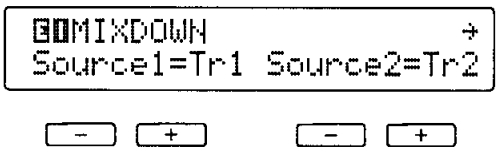
As described at the beginning of this manual, the various functions in the sequencer edit mode are accessed by using the [▲] and [▼] buttons, while the various display screens provided by each function are accessed by using the [◀] and [▶] buttons.

NOTE: The sequencer record and playback modes can not be engaged while in the edit mode.

E1. MIXDOWN

Sequencer Edit Page 1

1



2

■ Purpose:

Combines the data from two different "source" tracks and copies the result to a third "destination" track.

■ Procedure:

Use the [◀] and [▶] buttons to switch between the two display screens, and the left or right [-] and [+] buttons to set the first source track (Source1), the second source track (Source2), and the destination track (Dest.).

Once the source and destination tracks have been selected, press the [+] button below "Execute" on the right side of the display to actually execute the mixdown operation. "Sequencer Executing!" will appear on the lower line of the display while the operation is in progress, and "Completed!" will appear briefly when the operation has finished.

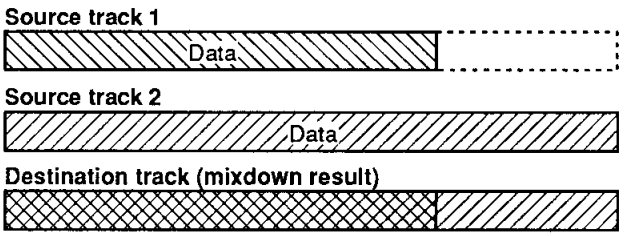
Immediately after execution "UndoExecute" will appear above the right [-] button, and that button can be used to undo the mixdown if it was executed by mistake. The undo function is only available until the next operation is performed.

■ Notes:

The mixdown function is most useful when you want to record more than 7 individual parts on the seven orchestra-part tracks. Successfully recorded parts can be combined using this function, thus opening up more tracks for further recording. The data in the source tracks is not erased during a mixdown operation.

If the tracks that are mixed down use different voices, the voice of the lower-numbered track will be used. Subsequent recorded voice changes will operate normally.

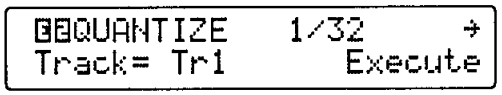
Please note that only tracks containing data can be specified as the source tracks.



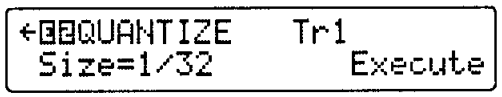
E2. QUANTIZE

Sequencer Edit Page 2

1



2



■ Purpose:

Aligns notes in the specified track to the nearest specified beat.

■ Procedure:

Use the [◀] and [▶] buttons to switch between the two display screens, and the left or right [-] and [+] buttons to set the track number (Track) and the quantize size (Size).

Once the track number and quantize size have been selected, press the [+] button below "Execute" on the right side of the display to actually execute the quantize operation. "Sequencer Executing!" will appear on the lower line of the display while the operation is in progress, and "Completed!" will appear briefly when the operation has finished.

Immediately after execution "UndoExecute" will appear above the right [-] button, and that button can be used to undo the quantize operation if it was executed by mistake. The undo function is only available until the next operation is performed.

The Quantize Sizes are:

1/4 = 1/4 note

1/6 = 1/4 note triplet

1/8 = 1/8 note

1/12 = 1/8 note triplet

1/16 = 1/16 note

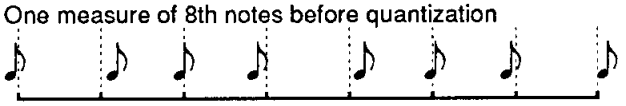
1/24 = 1/16 note triplet

1/32 = 1/32 note

■ Notes:

Quantization is generally used to tighten up sloppy timing. Use it judiciously, however, because timing that is too perfect can sound cold and mechanical — unless, of course, you're specifically aiming for a cold, mechanical feel. Always use a quantize value that is at least as "short" as the shortest notes in the track to be quantized. If you quantize a track containing 16th notes to 1/8 (8th notes), for example, some of the 16th notes will be aligned with 8th note beats, thus ruining the track.

One measure of 8th notes before quantization

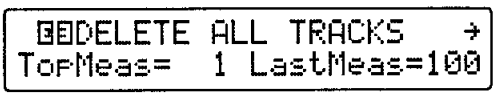


After quantization

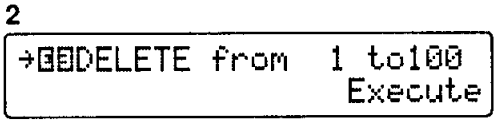
E3. DELETE

Sequencer Edit Page 3

1



2



■ Purpose:

Deletes the specified measure or range of measures from all tracks (including the accompaniment track).

■ Procedure:

Use the [◀] and [▶] buttons to switch between the two display screens, and the left or right [-] and [+] buttons in the first display screen to specify the number of the first measure in the range to be deleted (TopMeas) and the number of the last measure in the range to be deleted (LastMeas).

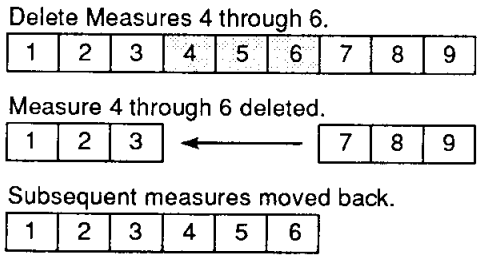
Once the top and last measure numbers have been selected, press the [+] button below "Execute" on the right side of the second display screen to actually execute the delete operation. "Sequencer Executing!" will appear on the lower line of the display while the operation is in progress, and "Completed!" will appear briefly when the operation has finished.

■ Notes:

It's important to remember that a delete operation affects all tracks simultaneously, and that measures following the deleted range are moved back to take the place of the deleted measures. This differentiates the delete job from the erase job (described later), which replaces data in the specified range with rests.

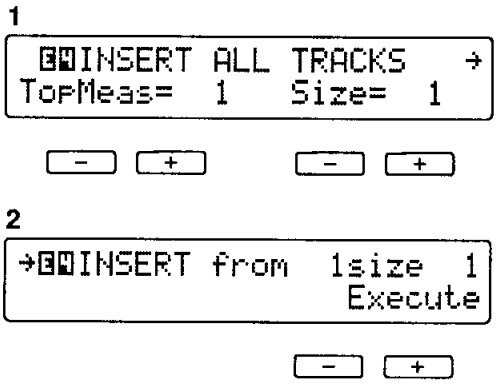
Be careful when deleting measures that contain effect on/off events — e.g. pitch bend, modulation, sustain, harmony, etc. If, for example, you delete a measure that contains a pitch bend off event, the pitch bend applied in a previous measure will remain in effect until the next pitch bend event is encountered.

The delete operation has no "undo" function, so be absolutely sure you want to delete the selected material before actually executing the delete operation.



E4. INSERT

Sequencer Edit Page 4



■ Purpose:

Inserts a specified number of blank measures in all tracks (including the accompaniment track) at the specified measure number.

■ Procedure:

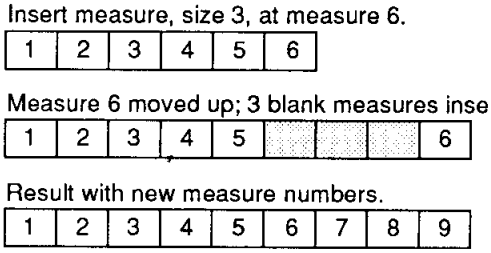
Use the [◀] and [▶] buttons to switch between the two display screens, and the left or right [-] and [+] buttons in the first display screen to specify the number of the measure at which the blank measures are to be inserted (TopMeas) and the number of blank measures to be inserted (Size).

Once the top measure number and size have been selected, press the [+] button below "Execute" on the right side of the second display screen to actually execute the insert operation. "Sequencer Executing!" will appear on the lower line of the display while the operation is in progress, and "Completed!" will appear briefly when the operation has finished.

■ Notes:

Insert affects all tracks simultaneously. The specified number of blank measures is inserted before the existing data beginning at the specified insert measure number.

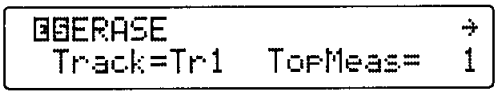
The blank measures will have the same time signature as the accompaniment style recorded on the ACCOMP. track. If no data is recorded on the ACCOMP. track the time signature of the currently selected style will be used. The insert operation has no "undo" function.


Insert measure, size 3, at measure 6.
1 2 3 4 5 6
Measure 6 moved up; 3 blank measures inserted.
1 2 3 4 5 6
Result with new measure numbers.
1 2 3 4 5 6 7 8 9

E5. ERASE

Sequencer Edit Page 5

1



2

■ Purpose:

Erases all note and event (pitch bend, volume changes, etc.) data from the specified measure or range of measures in the specified track, leaving blank measures.

■ Procedure:

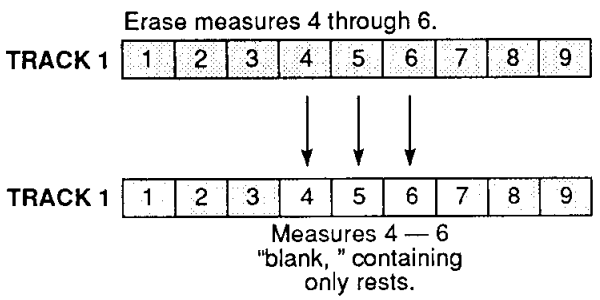
Use the [◀] and [▶] buttons to switch between the two display screens, and the left or right [-] and [+] buttons to set the track number (Track), the number of the first measure in the range to be erased (TopMeas), and the number of the last measure in the range to be erased (LastMeas).

Once the track and measure numbers have been selected, press the [+] button below "Execute" on the right side of the display to actually execute the erase operation. "Sequencer Executing!" will appear on the lower line of the display while the operation is in progress, and "Completed!" will appear briefly when the operation has finished.

Immediately after execution "UndoExecute" will appear above the right [-] button, and that button can be used to undo the erase operation if it was executed by mistake. The undo function is only available until the next operation is performed.

■ Notes:

An erase operation leaves the specified measures intact but blank.

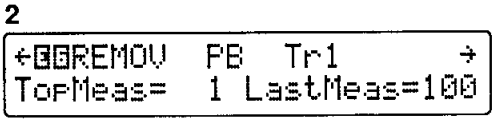


E6. REMOVE EVENT

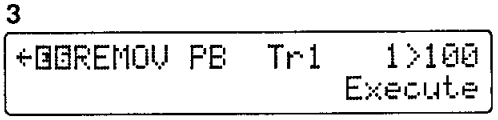
Sequencer Edit Page 6

1

2



3



■ Purpose:

Removes all occurrences of the specified event type (pitch bend, modulation wheel, volume, or sustain operations) from the specified measure or range of measures in the specified track.

■ Procedure:

Use the [◀] and [▶] buttons to switch between the three display screens, and the left or right [-] and [+] buttons to set the track number (Track), the type of event to be removed (Event), the number of the first measure in the range from which the events are to be removed (TopMeas), and the number of the last measure in the range from which the events are to be removed (LastMeas).

Once the track, event, and measure numbers have been specified, press the [+] button below "Execute" on the right side of the display to actually execute the remove event operation. "Sequencer Executing!" will appear on the lower line of the display while the operation is in progress, and "Completed!" will appear briefly when the operation has finished.

Immediately after execution "UndoExecute" will appear above the right [-] button, and that button can be used to undo the remove event operation if it was executed by mistake. The undo function is only available until the next operation is performed.

The Event Abbreviations are:
PB = Pitch Bend
MOD = Modulation Wheel
VOL = Volume
SUS = Sustain

■ Notes:

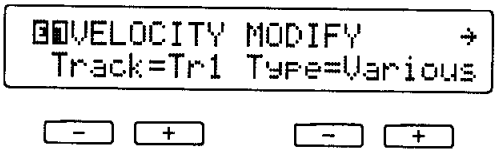
This function is handy if, for example, you've played some wild pitch bends that don't sound right. You can remove only the offending pitch bends without erasing the entire track.

Be careful when removing effect on/off events. If, for example, you remove a pitch bend off event in a specified measure, the pitch bend applied in a previous measure will remain in effect until the next pitch bend event is encountered.

E7. VELOCITY MODIFY

Sequencer Edit Page 7

1



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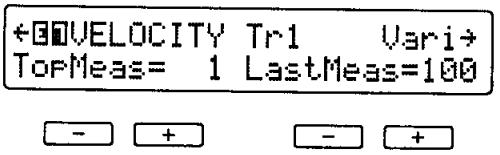
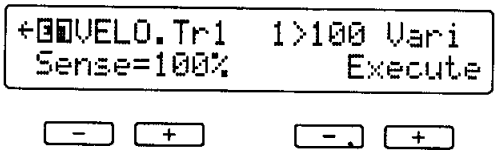


3



■ Purpose:

Modifies all velocity (keyboard velocity) values in the specified measure or range of measures in the specified track by a percentage, or sets all velocity values in the same range to a fixed value.

■ Procedure:

Use the [◀] and [▶] buttons to switch between the three display screens, and the left or right [-] and [+] buttons to set the track number (Track), the type velocity modification (Type = Various or Fixed — see "Notes" below), the number of the first measure in the range in which the velocity values are to be modified (TopMeas), the number of the last measure in the range in which the velocity values are to be modified (LastMeas), and the percentage or fixed value to be applied to the velocity values (Sense or Velo. — see "Notes" below).

Once the track, modify type, measure numbers, and modify value have been specified, press the [+] button below "Execute" on the right side of the display to actually execute the velocity modify operation. "Sequencer Executing!" will appear on the lower line of the display while the operation is in progress, and "Completed!" will appear briefly when the operation has finished.

Immediately after execution "UndoExecute" will appear above the right [-] button, and that button can be used to undo the velocity modify operation if it was executed by mistake. The undo function is only available until the next operation is performed.

■ Notes:

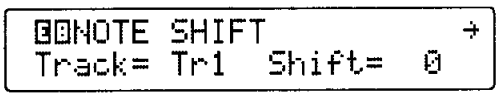
When the "Various" modify type is selected, all velocity values in the specified range are modified by a percentage, specified by the "Sense" parameter. The Sense range is from 1% to 200%. A setting of 100% results in no change. Values higher than 100% increase all velocities in the specified range by a corresponding amount, so the overall sound will be louder but the dynamics will be retained. Values lower than 100% decrease the velocities by a corresponding amount for an softer overall sound. Please note that Sense percentages cannot increase or decrease velocities beyond their absolute maximum or minimum values.

When the "Fixed" modify type is selected, all velocity values in the specified range will be set to the value specified by the "Velo." parameter (the "Velo." parameter replaces the "Sense" parameter when the "Fixed" type is selected). In this case the velocity values correspond to the standard MIDI velocity values — 1 through 127. "127" is the maximum velocity.

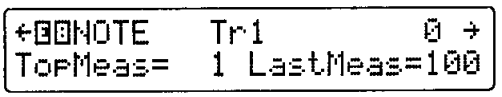
E8. NOTE SHIFT

Sequencer Edit Page 8

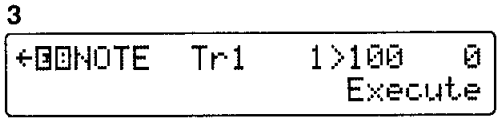
1



2



3



■ Purpose:

Shifts the pitch of notes in the specified measures of the specified track up or down by a maximum of two octaves, in semitone increments.

■ Procedure:

Use the [◀] and [▶] buttons to switch between the three display screens, and the left or right [-] and [+] buttons to set the track number (Track), the amount of note shift (Shift — see "Notes" below), the number of the first measure in the range in which the notes are to be shifted (TopMeas), and the number of the last measure in the range in which the notes are to be shifted (LastMeas).

Once the track, shift, and measure numbers have been specified, press the [+] button below "Execute" on the right side of the display to actually execute the note shift operation. "Sequencer Executing!" will appear on the lower line of the display while the operation is in progress, and "Completed!" will appear briefly when the operation has finished.

Immediately after execution "UndoExecute" will appear above the right [-] button, and that button can be used to undo the note shift operation if it was executed by mistake. The undo function is only available until the next operation is performed.

■ Notes:

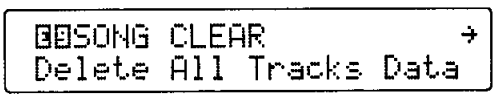
The range of "Shift" values is from -24 to +24. A setting of "0" produces no note shift. Each increment represents a semitone, so a setting of +4, for example, would shift the pitch of notes in the specified range up by an interval of a third. A setting of -12 would shift the notes down by one octave.

The ability to selectively shift the pitch of specified measures and tracks makes it simple to create "modulations" (key changes) without having to reprogram entire passages, and to create simple harmonies.

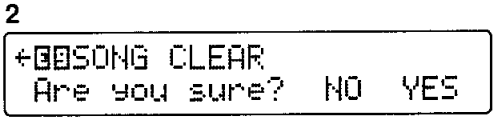
E9. SONG CLEAR

Sequencer Edit Page 9

1



2



■ Purpose:

Deletes the entire song — i.e. deletes all data from all sequencer tracks.

■ Procedure:

Press the [▶] button to move to the second display screen, then press the [+] button below "YES" on the display to execute the song clear operation, or the [-] button below "NO" to cancel the operation.

■ Notes:

Remember that this function deletes all data in the sequencer in one operation. If you think you might want to keep the data for later use or editing, be sure to save it to floppy disk (page 41, 43) before executing the song clear operation.

[F2] CUSTOM ACCOMPANIMENT PROGRAMMER

The PSR-6700 CUSTOM ACCOMPANIMENT feature allows you to create and store up to six original accompaniments — including rhythm, bass and chords — in addition to the 36 internal preset accompaniment styles. More custom accompaniments can be created and saved to floppy disk (page 41, 43). Your original accompaniments can be selected and played at any time, just like the presets.

Custom Accompaniment Programmer & Custom Accompaniment Programmer Edit Mode Functions

The functions listed below are available in the Custom Accompaniment Programmer and Custom Accompaniment Programmer Edit modes. Refer to the page numbers in parenthesis for details on the corresponding functions.

[F2] Button → Custom Accompaniment Programmer Mode

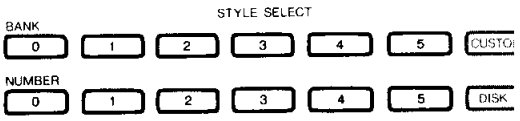
1. CUSTOM ACCOMP. (MEASURE/BEAT) ..... (22)
2. VOLUME ..... (22)
3. CUSTOM ACCOMP. (CUSTOM ACCOMP. STORE) ..... (23)
4. CUSTOM ACCOMP.NAME ..... (23)
5. FADER ..... (23)

[EDIT] Button → Custom Accompaniment Edit Mode

E1. QUANTIZE ..... (24)
E2. COPY ..... (25)
E3. ERASE ..... (25)
E4. REMOVE EVENT ..... (26)

Basic Programming Procedure

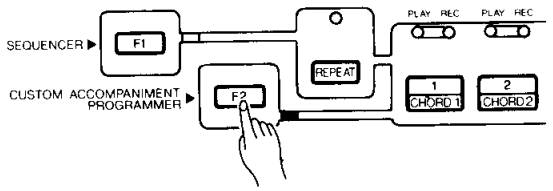
Although many of the steps outlined below do not have to be carried out in the order given, the basic programming procedure presented below will serve as useful guide to get you started.



1. Select a Suitable Accompaniment Style

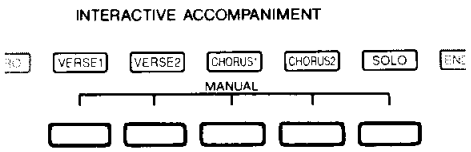
Begin by selecting one of the preset accompaniment styles that is close to the type of accompaniment you want to create.

- For example, select a WALTZ accompaniment style if you want to program a rhythm pattern in 3/4 time.



2. Engage the Custom Accompaniment Programmer

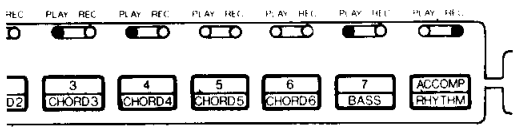
Press the [F2] CUSTOM ACCOMPANIMENT PROGRAMMER button. The selected accompaniment style will begin playing, with accompaniment based on a C major chord. Also, the rhythm track will be set to the record mode (red REC indicator lit) and the KEYBOARD PERCUSSION function will be engaged. All other tracks containing data will be set to the PLAY mode (green PLAY indicator lit). PLAY tracks can be muted by pressing the corresponding track button (the green PLAY indicator will flash when the track is muted).



3. Select an Accompaniment Variation

Use the Interactive Accompaniment [VERSE1], [VERSE2], [CHORUS1], [CHORUS2], and [SOLO] buttons to select the accompaniment variation you want to program.

Intro, fill-in, and ending patterns will be based on the selected variation. If you delete all existing data to program an accompaniment from scratch, and change the time signature (beat), the intro, fill-in, and ending patterns cannot be used.

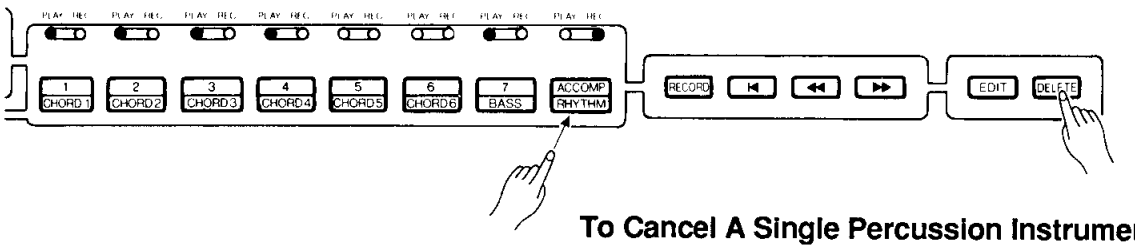


4. Program the Rhythm Part

Since the RHYTHM track is initially set to the REC mode and the KEYBOARD PERCUSSION mode is engaged, you can start programming the RHYTHM track immediately.

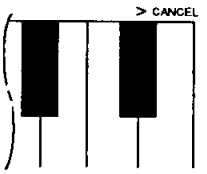
You can add new notes to the rhythm by playing the keys corresponding to the PSR-6700 drums, percussion instruments, and sound effects. The drums, percussion instruments, and sound effects produced are indicated by the symbols immediately above the keys (see the "KEYBOARD PERCUSSION KEYS" chart on page 23 of the "Getting Started" manual). Please note that pitch bend can not be applied to the rhythm instruments.

If you want to create a totally new rhythm track, press the RHYTHM track button while holding the [DELETE] button. This cancels all the instruments in the original rhythm track, leaving only a metronome sound (the metronome sound will not be heard while the rhythm is playing). The rhythm pattern can be up to 8 measures long (see "1. CUSTOM ACCOMP. Measure/Beat" on page 22), and the pattern will continue to repeat so you can add new instruments during each repeat, if necessary.



To Cancel A Single Percussion Instrument

Although you can cancel all instruments in the RHYTHM track by pressing the RHYTHM track button while holding the [DELETE] button, it is also possible to cancel a single instrument to eradicate a mistake or simply eliminate an unwanted instrument. While holding the CANCEL key (the highest key on the PSR-6700 keyboard), press the percussion key corresponding to the instrument you want to cancel. The selected instrument should now be cleared from the pattern.

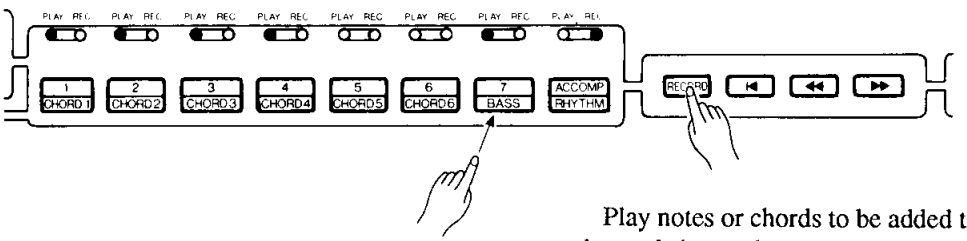


To Add Accents

Top accent specific beats after recording the rhythm, press the accent key (the second to highest key on the keyboard, with the ">" symbol) at the timing of beats you want to accent.

5. Program the Bass and Chord Parts

After the RHYTHM track has been programmed (or it can be left as it is if no changes are required), you can select a bass or chord track for programming by pressing the BASS or a CHORD track button while holding the [REC] button. The RHYTHM track will automatically switch to the PLAY mode when a new REC track is specified. Please remember that only one track can be programmed at a time.



Play notes or chords to be added to the existing data, or delete all data on the track (press the track button while holding the [DELETE] button) and start from scratch. The bass and chord tracks must be programmed in the key of C major!

Continue selecting new record tracks and variations, and program until your custom accompaniment is complete.

- Unwanted tracks can be deleted from the accompaniment by holding the [DELETE] button and pressing the appropriate track button.

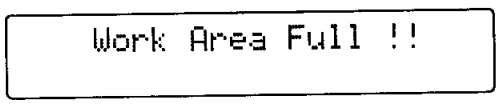
- Although the bass and chord tracks must be programmed in C major, they are automatically re-harmonized when the custom accompaniment is used in the play mode, and can be used in any key, major or minor.

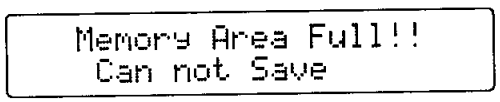
- When programming an accompaniment from scratch, you can select a new voice that will take effect from the beginning of the accompaniment after deleting all tracks. Other voice changes added while programming will take effect from the point at which they are made.

- The synchro start, start, and stop functions can be used when recording a custom accompaniment.

- Pitch bend, modulation, and sustain changes are not recorded if the accompaniment is stopped — the accompaniment must be running for parameter changes to be recorded.

- The preset styles have note limits for some tracks which are applied when Auto Bass Chord accompaniment is used. This means, for example, that a bass track may be limited to a specific range and that notes outside of this range will be note-shifted and played within the limits. These same note limits will apply to notes you record using the Custom Accompaniment Programmer unless the track is deleted prior to recording.





- The Custom Accompaniment Programmer memory capacity is limited. When the available memory for the track you are recording is exhausted, the "Work Area Full !!" display will appear and further recording on that track will be impossible unless existing data is deleted. Further, if the data size is too big when you perform a save operation, "Memory Area Full!!/ Can not Save" will appear on the display.

6. Set a New Default Tempo

If necessary, set a new default tempo for the custom accompaniment by using the TEMPO [-] and [+] buttons.

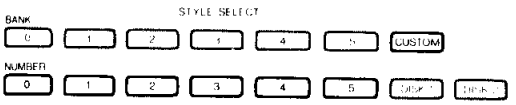
7. Give the Finished Accompaniment a Name and Assign it to a CUSTOM Number

Use the "4. CUSTOM ACCOMP. NAME" function described on page 23 to give your custom accompaniment an original name, then use the "3. CUSTOM ACCOMP." function described on page 23 to assign the accompaniment to a CUSTOM number and exit from the Custom Accompaniment Programmer mode.

- Please note that if you attempt to exit from the Custom Accompaniment Programmer by pressing the [EXIT] button or any other function button, the confirmation display shown to the left will appear:

  Use the left [-] and [+] buttons to select the custom accompaniment number to which the accompaniment is to be stored, then press the [+] button under "YES" on the display to store the accompaniment. Press the [-] button under "NO" on the display to exit from the Custom Accompaniment Programmer without storing the data.

Using a Custom Accompaniment



Once created and stored, your original accompaniment can be selected and used in the same way as the preset accompaniment styles.

Press the [CUSTOM] button and then the appropriate STYLE SELECT NUMBER button (0 through 5) to select a custom accompaniment — C0, C1, C2, C3, C4, or C5. The selected custom accompaniment can then be operated just like any of the preset accompaniment styles — it can be started and stopped as usual, and can be used in the FINGERED or SINGLE FINGER AUTO BASS CHORD modes.

- To select a preset accompaniment style after selecting a custom accompaniment, use the STYLE SELECT buttons in the normal way.

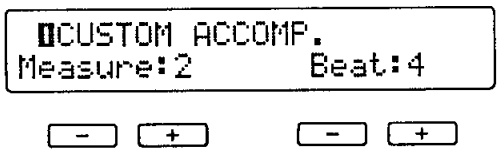
Other Custom Accompaniment Programmer Functions

As described at the beginning of this manual (page 3), the following Custom Accompaniment Programmer functions are accessed by using the [▲] and [▼] buttons, while the various display screens provided by each function are accessed by using the [◀] and [▶] buttons.

1. CUSTOM ACCOMP.

(MEASURE/BEAT)

Custom Accomp. Page 1



■ Purpose:

When all tracks of an accompaniment have been deleted, this display page allows the length (in measures) and time signature of the accompaniment to be defined.

■ Procedure:

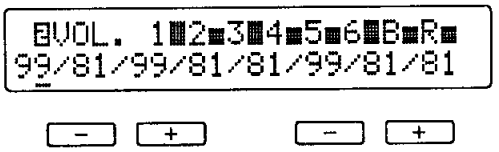
Use the left [-] and [+] to specify the numbers of measures the accompaniment is to have (from 1 to 8), and the right [-] and [+] buttons to specify the number of beats per measure.

■ Notes:

These parameters can only be changed when you're creating an entirely new pattern from scratch — i.e. you have deleted all tracks from the original accompaniment by holding the [DELETE] button and pressing the buttons of all tracks containing data so that no PLAY indicators remain lit.

2. VOLUME

Custom Accomp. Page 2



■ Purpose:

This page lets you independently set the volume of each of the Custom Accompaniment Programmer's tracks.

■ Procedure:

Use the [◀] and [▶] buttons to position the cursor at the volume parameter of the track you want to adjust (1 through 6, "B" for BASS, and "R" for RHYTHM, from left to right), then use either the left or right [-] and [+] buttons to set the volume to a value between "00" (minimum volume — no sound) and "99" (maximum volume). Vertical bar-graphs to the right of each track number on the top line of the display provide a graphic representation of the track volume levels.

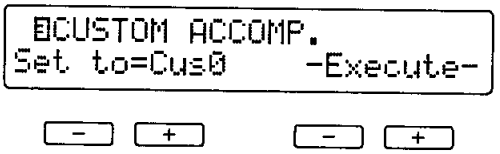
■ Notes:

Only tracks that contain data are available for volume control.

3. CUSTOM ACCOMP.

(CUSTOM ACCOMP. STORE)

Custom Accomp. Page 3



■ Purpose:

This function stores the current custom accompaniment to a specified custom accompaniment number.

■ Procedure:

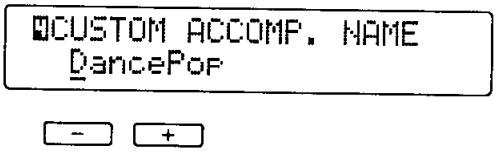
When the "Set to" parameter has been set as required (see "Notes" below), press the right [-] and [+] buttons under "-Execute-" on the display to actually store the current custom accompaniment in the specified custom accompaniment number. "Completed" will appear when the operation is complete.

■ Notes:

The "Set to" parameter in the first display screen determines to which custom accompaniment number the accompaniment will be stored — Cus0, Cus1, Cus2, Cus3, Cus4, or Cus5.

4. CUSTOM ACCOMP. NAME

Custom Accomp. Page 4



■ Purpose:

Allows a name of up to 8 characters to be assigned to the current custom accompaniment before it is stored via the preceding "3. CUSTOM ACCOMP." function.

■ Procedure:

Use the [◀] and [▶] buttons to move the underline cursor to the various character positions, then use the left [-] and [+] buttons to select the required character for each position.

■ Notes:

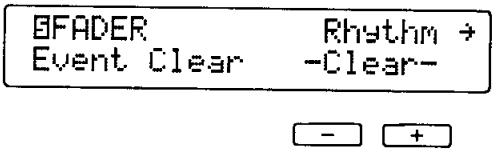
Here's a list of the characters that can be selected via the left [-] and [+] buttons.

```
[Space]!"#$%&'()*+,-./0123456789:;
<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ
[¥]^_`abcdefghijklmnopqrstuvwxyz
{|}→←
```

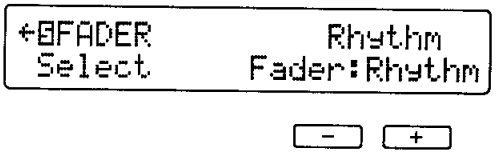
5. FADER

Custom Accomp. Page 5

1



2



■ Purpose:

Allows all fader data (volume changes) to be cleared from the current record track, and allows the current CHORD track to be assign to the CHORD 1 or CHORD 2 volume control fader.

■ Procedure:

Use the [◀] and [▶] buttons to switch between display screens.

Press both the right [-] and [+] buttons below "-Clear-" in the first display screen to clear all fader events from the current record track. "Completed" will appear when the clear operation has been completed.

Use the right [-] and [+] buttons in the second display screen to assign the current CHORD record track to the CHORD 1 (CHD1) or CHORD 2 (CHD2) volume control fader.

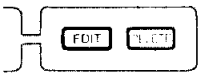
■ Notes:

When the BASS or RHYTHM track is in the record mode, use the BASS or RHYTHM volume control fader.

Custom Accompaniment Editing

The PSR-6700 custom accompaniment edit mode offers a range of functions that let you modify the recorded data in a number of ways.

Press the [EDIT] button while the Custom Accompaniment Programmer is engaged to enter the edit mode. When you're finished editing press the [EDIT] button again to return to the Custom Accompaniment Programmer.

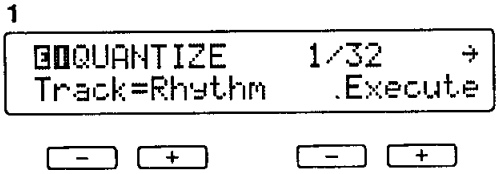


As described at the beginning of this manual, the various functions in the Custom Accompaniment edit mode are accessed by using the [▲] and [▼] buttons, while the various display screens provided by each function are accessed by using the [◀] and [▶] buttons.

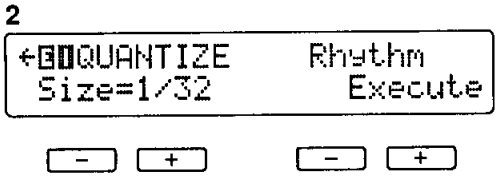
E1. QUANTIZE

Custom Accomp. Edit Page 1

1



2



■ Purpose:

Aligns notes in the specified track to the nearest specified beat.

■ Procedure:

Use the [◀] and [▶] buttons to switch between the two display screens, and the left or right [-] and [+] buttons to set the track number (Track) and the quantize size (Size).

Once the track number and quantize size have been selected, press the [+] button below "Execute" on the right side of the display to actually execute the quantize operation.

Immediately after execution "UndoExecute" will appear above the right [-] button, and that button can be used to undo the quantize operation if it was executed by mistake. The undo function is only available until the next operation is performed.

The Quantize Sizes are:

1/4 = 1/4 note

1/6 = 1/4 note triplet

1/8 = 1/8 note

1/12 = 1/8 note triplet

1/16 = 1/16 note

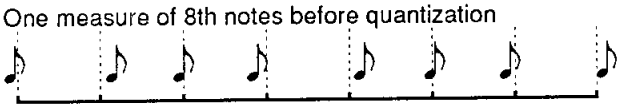
1/24 = 1/16 note triplet

1/32 = 1/32 note

■ Notes:

Quantization is generally used to tighten up sloppy timing. Use it judiciously, however, because timing that is too perfect can sound cold and mechanical — unless, of course, you're specifically aiming for a cold, mechanical feel. Always use a quantize value that is at least as "short" as the shortest notes in the track to be quantized. If you quantize a track containing 16th notes to 1/8 (8th notes), for example, some of the 16th notes will be aligned with 8th note beats, thus ruining the track.

One measure of 8th notes before quantization

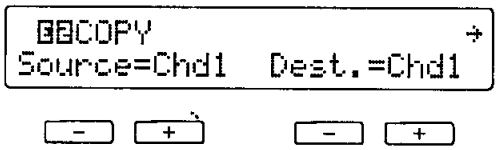


After quantization

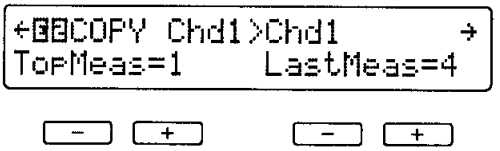
E2. COPY

Custom Accomp. Edit Page 2

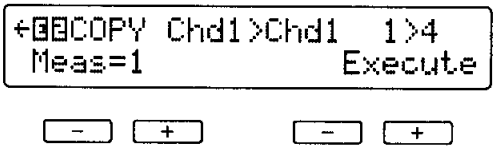
1



2



3



■ Purpose:

Copies a specified measure or range of measures from the source track to the specified measure number in the destination track.

■ Procedure:

Use the [◀] and [▶] buttons to switch between the three display screens, and the left or right [-] and [+] buttons in the various screens to specify the source track number (Source), the destination track number (Dest.), number of the first measure of the range to be copied (TopMeas) the number of last measure of the range to be copied (LastMeas), and the number of the measure (Meas) in the destination track to which the data is to be copied.

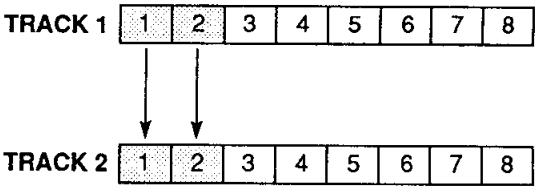
Once the track numbers and measure numbers have been selected, press the [+] button below "Execute" on the right side of the third display screen to actually execute the copy operation.

Immediately after execution "UndoExecute" will appear above the right [-] button, and that button can be used to undo the copy operation if it was executed by mistake. The undo function is only available until the next operation is performed.

■ Notes:

A copy operation overwrites the data from the beginning of the specified destination measure with the data from the source measure(s). Previous data in the overwritten measures is therefore lost.

Copy measures 1 through 2 from track 1 to measure 1 in track 2.



E3. ERASE

Custom Accomp. Edit Page 3

1

2

■ Purpose:

Erases all note and event data from the specified measure or range of measures in the specified track, leaving blank measures.

■ Procedure:

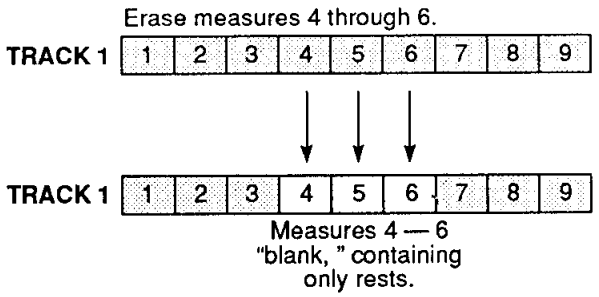
Use the [◀] and [▶] buttons to switch between the two display screens, and the left or right [-] and [+] buttons to set the track number (Track), the number of the first measure in the range to be erased (TopMeas), and the number of the last measure in the range to be erased (LastMeas).

Once the track and measure numbers have been selected, press the [+] button below "Execute" on the right side of the display to actually execute the erase operation.

Immediately after execution "UndoExecute" will appear above the right [-] button, and that button can be used to undo the erase operation if it was executed by mistake. The undo function is only available until the next operation is performed.

■ Notes:

An erase operation leaves the specified measures intact but blank.

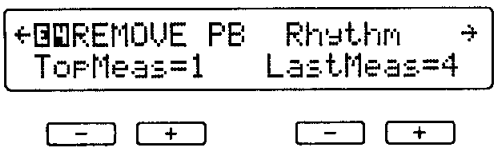


E4. REMOVE EVENT

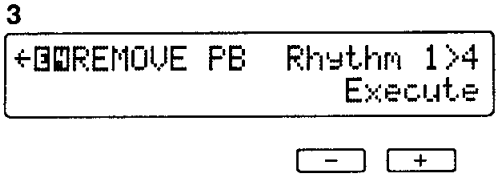
Custom Accomp. Edit Page 4

1

2



3



■ Purpose:

Removes all occurrences of the specified event type (volume, sustain, pitch bend, or modulation wheel operations) from the specified measure or range of measures in the specified track.

■ Procedure:

Use the [◀] and [▶] buttons to switch between the three display screens, and the left or right [-] and [+] buttons to set the track number (Track), the type of event to be removed (Event), the number of the first measure in the range from which the events are to be removed (TopMeas), and the number of the last measure in the range from which the events are to be removed (LastMeas).

Once the track, event, and measure numbers have been specified, press the [+] button below "Execute" on the right side of the display to actually execute the remove event operation.

Immediately after execution "UndoExecute" will appear above the right [-] button, and that button can be used to undo the remove event operation if it was executed by mistake. The undo function is only available until the next operation is performed.

The Event Abbreviations are:

VOL = Volume
SUS = Sustain
PB = Pitch Bend
MOD = Modulation Wheel

■ Notes:

This function is handy if, for example, you've played some wild pitch bends that don't sound right. You can remove only the offending pitch bends without erasing the entire track.

Be careful when removing effect on/off events. If, for example, you remove a pitch bend off event in a specified measure, the pitch bend applied in a previous measure will remain in effect until the next pitch bend event is encountered.

[F3] CUSTOM VOICE EDIT

The Custom Voice Edit mode allows you to edit any of the PSR-6700 voices to create new sounds that ideally match your own music style. 100 custom voices — 00 through 99 — can be programmed, each based on the correspondingly-numbered preset voice.

After selecting the voice you want to edit*, press the [F3] CUSTOM VOICE EDIT button to engage the Custom Voice Edit mode. Use the various editing functions described below to modify the sound to suit your needs. Then press the [EXIT] button when you're finished editing to return to the normal play mode.

Your custom voices can be selected and played by pressing the VOICE PART [CUSTOM] button in the play mode and using the VOICE SELECT buttons in the normal way (the custom voice numbers are displayed in reversed letters).

** You can also select a different voice while the Custom Voice Edit mode is engaged via the VOICE SELECT buttons. In this case the normal voice selection display will appear while the VOICE SELECT buttons are being used, and for a few seconds afterwards. The display will then revert to the previous Custom Voice Edit display page.*

• Please note that some voices may suddenly shift to a different octave or change in level when played on the highest or lowest keys. There may also be slight tonal changes at one or more points on the keyboard.

Custom Voice Edit Mode Functions

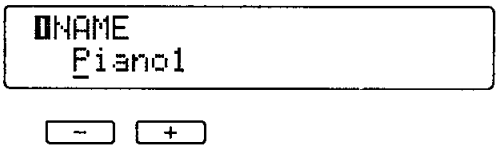
The functions listed below are available in the Custom Voice Edit mode. Refer to the page numbers in parenthesis for details on the corresponding functions.

[F3] Button → Custom Voice Edit Mode

1. NAME ..... (28)
2. COMMON ..... (28)
3. EG RATE ..... (29)
4. ELEMENT WAVE ..... (30)
5. ELEMENT ENVELOPE TYPE ..... (32)
6. ELEMENT VOLUME ..... (33)
7. ELEMENT DETUNE ..... (33)

1. NAME

Custom Voice Edit Page 1



■ Purpose:

Allows an 8-character name to be assigned to the voice.

■ Procedure:

Use the [◀] and [▶] buttons to position the cursor at the desired character location, then use the left [-] and [+] buttons to select the desired character. A chart of the available characters is given below.

```
[Space]!"#$%&'()*+,-./0123456789:;
<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ
[¥]^_`abcdefghijklmnopqrstuvwxyz
{|}→←
```

■ Notes:

It's a good idea to give your voices names that make them easily identifiable. If you've created a new voice that combines piano and organ elements, for example, you could call it something like "PianOrg".

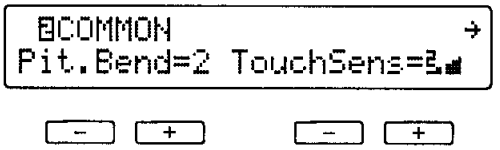
2. COMMON

Custom Voice Edit Page 2

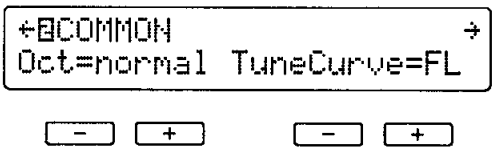
COMMON includes three display screens covering a range of parameters that affect the entire voice.

Use the [◀] and [▶] buttons to select the various display screens, and the [-] and [+] buttons below each parameter to set the required values.

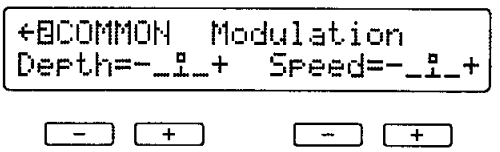
1



2



3



● Pitch Bend Range

Sets the range of the pitch bend wheel to "0" (OFF), "1" (±1 semitone), or "2" (±2 semitones).

● Touch Sensitivity

Sets the touch sensitivity of the keyboard to "0" (OFF), "1" (low), "2" (medium), or "3" (high).

● Octave

Shifts the pitch of the voice up one octave (1up) or down one octave (1down). A setting of "normal" produces the normal pitch for that voice.

- Some voices may exhibit sudden pitch changes in the highest and lowest ranges of the keyboard when shifted up or down by an octave. The pitch bend wheel may also cause sudden pitch changes.

● Tune Curve

Selects a flat (FL), piano 1 (P1) or piano 2 (P2) tuning curve for the keyboard. Although the differences are slight, the P1 and P2 curves are closer to tunings used with acoustic pianos, while FL is a pure equal-temperament curve.

● Modulation Depth

Decreases (-) or increases (+) the depth of modulation produced by the PSR-6700 MODULATION wheel relative to the original modulation depth of the selected voice.

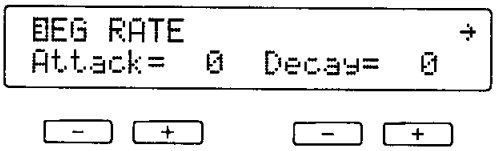
● Modulation Speed

Decreases (-) or increases (+) the speed of modulation produced by the MODULATION wheel relative to the original modulation speed of the selected voice.

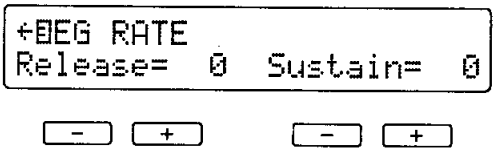
3. EG RATE

Custom Voice Edit Page 3

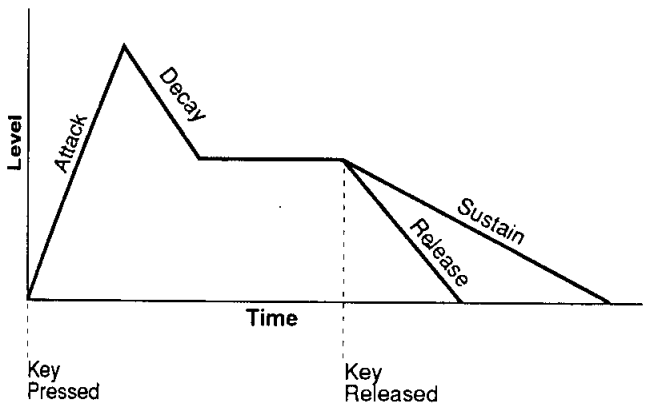
1



2



The attack, decay, sustain, and release parameters provided here let you shape the volume envelope of the voice. Here's a general outline of the envelope parameters:



● Attack

Sets the speed of attack — i.e. how fast the sound reaches maximum level after a key is pressed.

"0" sets the normal attack for the selected voice, minus settings produce a slower attack, and plus settings produce a faster attack.

● Decay

Sets the speed of decay portion of the envelope — i.e. how fast the sound decays from the maximum attack level to its normal level.

"0" sets the normal decay for the selected voice, minus settings produce a slower decay, and plus settings produce a faster decay.

● Release

Sets the speed of release — i.e. how fast the sound decays after a key is released when the panel [SUSTAIN] button is off and the sustain pedal is not pressed.

"0" sets the normal release for the selected voice, minus settings produce a slower release decay, and plus settings produce a faster release decay.

● Sustain

Sets the speed of sustain decay — i.e. how fast the sound decays after a key is released when the panel [SUSTAIN] button is on or the sustain pedal is pressed.

"0" sets the normal sustain for the selected voice, minus settings produce a longer sustain decay, and plus settings produce a faster sustain decay.

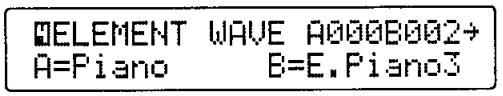
■ Notes:

Since PIANO 1 (00) and some other voices already have the fastest possible attack, increasing the Attack parameter value will have no audible effect. Also, no sound will be produced if the Decay parameter for such voices is set to "+50."

4. ELEMENT WAVE

Custom Voice Edit Page 4

1



2

■ Purpose:

Each PSR-6700 voice is composed of two or four "elements." Each element is an independent waveform, and the combinations of waveforms that make up the PSR-6700 voices are one of the reasons for its deep, rich sound.

This function allows different waveforms to be assigned to each element in the voice.

■ Procedure:

Use the [◀] and [▶] buttons to switch between display screens, and use the [-] and [+] buttons to select the required waveform for each element — A, B, C and D.

■ Notes:

In voices that only have two elements, only elements A and B will be available.

Waveforms numbered 000 through 103 can be selected for elements A and C, while waveforms numbered 000 through 255 are available for elements B and D. The name of the waveform is shown on the bottom line of the display, and its number is shown to the right of the element letter (A, B, C or D) on the top line of the display. The group of 104 waveforms for elements A and C, and the group of 256 waveforms for elements B and D are actually different types of waveforms. A list of the waveforms is given below.

Waveform lists

ELEMENT A, C WAVE NAMES

000 Piano	052 E. Bass 3
001 E. Piano	053 E. Bass 4
002 Clavi	054 E. Bass 5
003 Cembalo	055 E. Bass 6
004 Celesta	056 Slap Bass
005 Pipe Organ 1	057 Fretless Bass
006 Pipe Organ 2	058 Synth Bass 1
007 E. Organ 1	059 Synth Bass 2
008 E. Organ 2	060 Synth Bass 3
009 E. Organ 3	061 Vibes
010 E. Organ 4	062 Marimba
011 Reed 1	063 Xylophone
012 Reed 2	064 Bells
013 Reed 3	065 Timpani
014 Strings	066 Steel Drum
015 Violin Ensemble	067 Bell Mix
016 Violin	068 Noise
017 Cello	069 Harmonic
018 Pizz. Strings	070 Coin
019 Synth Strings	071 Water
020 Harp	072 Bottle
021 Choir	073 Metal
022 Itopia	074 Bamboo
023 Flute	075 Trumpet Body
024 Clarinet	076 Trombone Body
025 Oboe	077 Horn Body
026 Saxophone 1	078 Strings Body
027 Saxophone 2	079 Air Brown
028 Trumpet 1	080 EP wv
029 Trumpet 2	081 Guitar wv
030 Mute Trumpet	082 Pad wv
031 Trombone	083 Digital 1
032 Flugel Horn	084 Digital 2
033 French Horn	085 Digital 3
034 Tuba	086 Saw 1
035 Brass	087 Saw 2
036 Synth Brass	088 Saw 3
037 Gut Guitar	089 Saw 4
038 Steel Guitar	090 Square 1
039 E. Guitar 1	091 Square 2
040 E. Guitar 2	092 Square 3
041 E. Guitar 3	093 Square 4
042 E. Guitar 4	094 Pulse 1
043 E. Guitar 5	095 Pulse 2
044 E. Guitar 6	096 Pulse 3
045 Mute Guitar	097 Pulse 4
046 Sitar	098 Pulse 5
047 Pluck	099 Pulse 6
048 Wood Bass 1	100 Triangle
049 Wood Bass 2	101 Sin8'
050 E. Bass 1	102 Sin8'+4'
051 E. Bass 2	103 Orchestra Hit

ELEMENT B, D WAVE NAMES	
000 E. Piano 1	064 Strings 2
001 E. Piano 2	065 Strings 3
002 E. Piano 3	066 Strings 4
003 E. Piano 4	067 Strings 5
004 E. Piano 5	068 Strings 6
005 E. Piano 6	069 Strings 7
006 E. Organ 1	070 Vibes 1
007 E. Organ 2	071 Vibes 2
008 E. Organ 3	072 Vibes 3
009 E. Organ 4	073 Vibes 4
010 E. Organ 5	074 Marimba 1
011 E. Organ 6	075 Marimba 2
012 E. Organ 7	076 Marimba 3
013 E. Organ 8	077 Bells 1
014 Brass 1	078 Bells 2
015 Brass 2	079 Bells 3
016 Brass 3	080 Bells 4
017 Brass 4	081 Bells 5
018 Brass 5	082 Bells 6
019 Brass 6	083 Bells 7
020 Brass 7	084 Bells 8
021 Brass 8	085 Metal 1
022 Brass 9	086 Metal 2
023 Brass 10	087 Metal 3
024 Brass 11	088 Metal 4
025 Brass 12	089 Metal 5
026 Brass 13	090 Metal 6
027 Brass 14	091 Lead 1
028 Wood 1	092 Lead 2
029 Wood 2	093 Lead 3
030 Wood 3	094 Lead 4
031 Wood 4	095 Lead 5
032 Wood 5	096 Lead 6
033 Wood 6	097 Lead 7
034 Wood 7	098 Sus. 1
035 Wood 8	099 Sus. 2
036 Reed 1	100 Sus. 3
037 Reed 2	101 Sus. 4
038 Reed 3	102 Sus. 5
039 Reed 4	103 Sus. 6
040 Reed 5	104 Sus. 7
041 Reed 6	105 Sus. 8
042 Clavi 1	106 Sus. 9
043 Clavi 2	107 Sus. 10
044 Clavi 3	108 Sus. 11
045 Clavi 4	109 Sus. 12
046 Guitar 1	110 Sus. 13
047 Guitar 2	111 Sus. 14
048 Guitar 3	112 Sus. 15
049 Guitar 4	113 Attack 1
050 Guitar 5	114 Attack 2
051 Guitar 6	115 Attack 3
052 Guitar 7	116 Attack 4
053 Guitar 8	117 Attack 5
054 Bass 1	118 Move 1
055 Bass 2	119 Move 2
056 Bass 3	120 Move 3
057 Bass 4	121 Move 4
058 Bass 5	122 Move 5
059 Bass 6	123 Move 6
060 Bass 7	124 Move 7
061 Bass 8	125 Decay 1
062 Bass 9	126 Decay 2
063 Strings 1	127 Decay 3

ELEMENT B, D WAVE NAMES	
128 Decay 4	192 Wave 7-3
129 Decay 5	193 Wave 8-1
130 Decay 6	194 Wave 8-2
131 Decay 7	195 Wave 8-3
132 Decay 8	196 Wave 9-1
133 Decay 9	197 Wave 9-2
134 Decay 10	198 Wave 9-3
135 Decay 11	199 Wave 10-1
136 Decay 12	200 Wave 10-2
137 Decay 13	201 Wave 10-3
138 Decay 14	202 Wave 11-1
139 Decay 15	203 Wave 11-2
140 Decay 16	204 Wave 11-3
141 Decay 17	205 Wave 12-1
142 Decay 18	206 Wave 12-2
143 SFX 1	207 Wave 12-3
144 SFX 2	208 Wave 13-1
145 SFX 3	209 Wave 13-2
146 SFX 4	210 Wave 13-3
147 SFX 5	211 Wave 14-1
148 SFX 6	212 Wave 14-2
149 SFX 7	213 Wave 14-3
150 Sin 16'	214 Wave 15-1
151 Sin 8'	215 Wave 15-2
152 Sin 4'	216 Wave 15-3
153 Sin 2 2/3'	217 Wave 16-1
154 Sin 2'	218 Wave 16-2
155 Saw 1	219 Wave 16-3
156 Saw 2	220 Wave 17-1
157 Square	221 Wave 17-2
158 Triangle	222 Wave 17-3
159 Noise 1	223 Wave 18-1
160 Noise 2	224 Wave 18-2
161 Digi 1	225 Wave 18-3
162 Digi 2	226 Wave 19-1
163 Digi 3	227 Wave 19-2
164 Digi 4	228 Wave 19-3
165 Digi 5	229 Wave 20-1
166 Digi 6	230 Wave 20-2
167 Digi 7	231 Wave 20-3
168 Digi 8	232 Wave 21-1
169 Digi 9	233 Wave 21-2
170 Digi 10	234 Wave 21-3
171 Digi 11	235 Wave 22-1
172 Wave 1-1	236 Wave 22-2
173 Wave 1-2	237 Wave 22-3
174 Wave 1-3	238 Wave 23-1
175 Wave 2-1	239 Wave 23-2
176 Wave 2-2	240 Wave 23-3
177 Wave 2-3	241 Wave 24-1
178 Wave 3-1	242 Wave 24-2
179 Wave 3-2	243 Wave 24-3
180 Wave 3-3	244 Wave 25-1
181 Wave 4-1	245 Wave 25-2
182 Wave 4-2	246 Wave 25-3
183 Wave 4-3	247 Wave 26-1
184 Wave 5-1	248 Wave 26-2
185 Wave 5-2	249 Wave 26-3
186 Wave 5-3	250 Wave 27-1
187 Wave 6-1	251 Wave 27-2
188 Wave 6-2	252 Wave 27-3
189 Wave 6-3	253 Wave 28
190 Wave 7-1	254 Wave 29
191 Wave 7-2	255 Wave 30

5. ELEMENT ENVELOPE TYPE

Custom Voice Edit Page 5

1

```
ELEMENT ENVELOPE TYPE→
A=PRESET     B=PRESET
```

[-] [+] [-] [+]

2

```
←ELEMENT ENVELOPE TYPE
 C=PRESET     D=PRESET
```

[-] [+] [-] [+]

■ Purpose:

Selects the preset amplitude envelope or an alternate generic envelope for each of the two or four elements used in the voice.

■ Procedure:

Use the [◀] and [▶] buttons to switch between display screens, and use the [-] and [+] buttons to select the required EG type for each element — A, B, C and D.

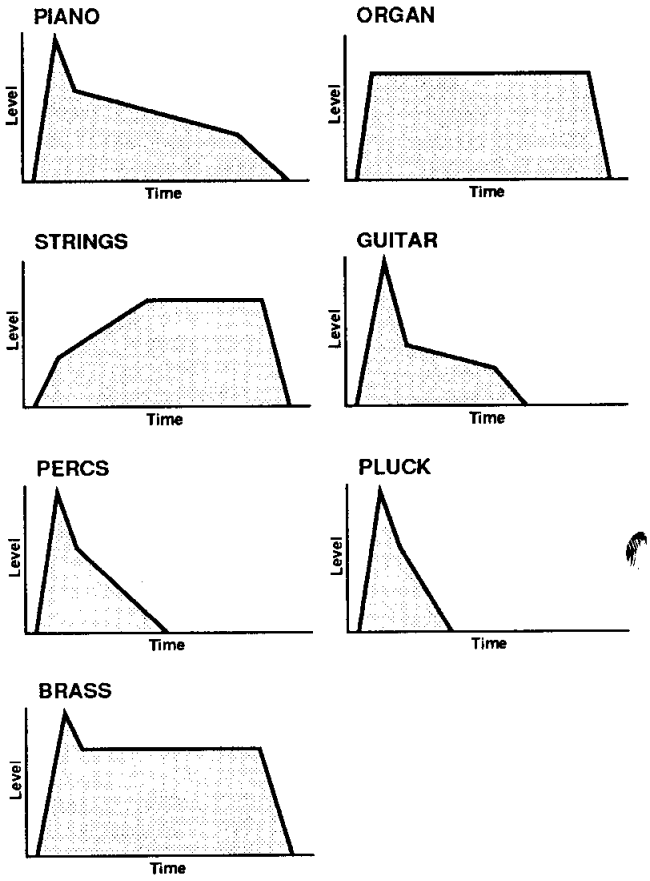
The Available EG Types are:

PRESET
PIANO 1
PIANO 2
ORGAN
STRINGS1
STRINGS2
GUITAR
PERCS.
PLUCK 1
PLUCK 2
BRASS 1
BRASS 2

■ Notes:

When "PRESET" is selected, the original preset envelope of the current element is used.

When any of the other EG types is selected, a generic envelope of the appropriate type is used. The basic shapes of the available envelope types are given below:



6. ELEMENT VOLUME

Custom Voice Edit Page 6

1

2

■ Purpose:

Independently sets the volume level of each of the two or four elements used by the selected voice.

■ Procedure:

Use the [◀] and [▶] buttons to switch between display screens, and use the [-] and [+] buttons to set the required volume for each element — A, B, C and D.

■ Notes:

The volume range for each envelope is from "0" (no sound) to "99" (maximum volume). Use these parameters to balance the volume levels of the two or four elements in the voice to create the best overall sound.

7. ELEMENT DETUNE

Custom Voice Edit Page 7

1

2

■ Purpose:

Independently detunes the pitch of each of the two or four elements used by the selected voice.

■ Procedure:

Use the [◀] and [▶] buttons to switch between display screens, and use the [-] and [+] buttons to set the required amount of detuning for each element — A, B, C and D.

■ Notes:

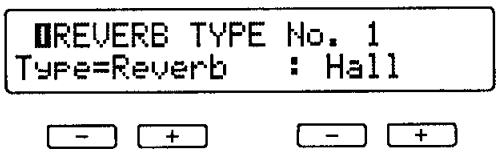
The [+] buttons move the corresponding level graph to the right, toward "+", thus increasing the pitch of that element by a small amount. The [-] button have the opposite effect. Judicious tuning can create a richer, thicker sound with many combinations of elements.

[F4] EFFECT/REVERB TYPE

The PSR-6700 has 25 reverb-based and 8 other effects that can be selected via the four pages accessed by the [F4] EFFECT/REVERB TYPE button. The selected reverb and effect types are applied to the sound when the EFFECT and REVERB buttons are used (see page 22 in the Getting Started manual).

1. REVERB

Effect/Reverb Type Page 1



■ Purpose:

Selects the reverb effect to be applied to the RHYTHM, ACCOMP. and/or ORCH. sound when the corresponding REVERB buttons are turned on (see page 22 of the "Getting Started" manual).

■ Procedure:

The right [-] and [+] buttons step through the reverb list effect by effect. For faster selection you can use the left [-] and [+] buttons to directly select the reverb categories — Reverb, Delay, etc — and then use the right [-] and [+] buttons to select the desired reverb effect within that category.

The Reverb Effects are:

1. **Reverb:** Hall
2. Reverb : Room
3. Reverb : Plate
4. Reverb : Church
5. Reverb : Club
6. Reverb : Stage
7. Reverb : Bathroom
8. Reverb : Metal
9. **Delay** : Short
10. Delay : Medium
11. Delay : OneShot
12. Delay : Long
13. **TempoSync** : Long
14. TempoSync : Short
15. **Echo** : Stereo
16. Echo : PingPong
17. **Refl&Gate** : Panned
18. Refl&Gate : Early
19. Refl&Gate : Gate
20. **Delay&Rev:** Single
21. Delay&Rev : DelayL/R
22. **Variation** : Tunnel
23. Variation : Distort
24. **Localizer** : 1
25. Localizer : 2

■ Notes:

The "TempoSync" effects produce a delay that is synchronized to the currently selected tempo. "Variation : Distort" produces a distortion effect. The "Localizer" effects emphasize the stereo sound field.

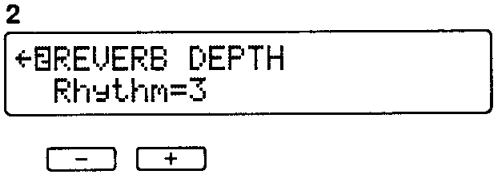
Try out all of the effects to get a feel for what they can do to your sound.

2. REVERB DEPTH

Effect/Reverb Type Page 2

1

2



■ Purpose:

Independently sets the depth of the selected reverb effect for the orchestra, accompaniment, and rhythm sound.

■ Procedure:

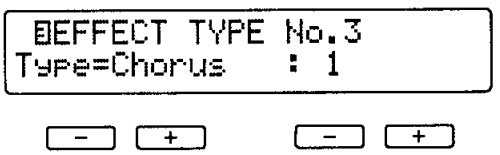
Use the [◀] and [▶] buttons to switch between display screens, and use the [-] and [+] buttons to set the reverb depth for each parameter.

■ Notes:

The reverb depth range is from "0" to "9". "0" is minimum depth and produces no effect. "9" is maximum depth and produces the most pronounced effect.

3. EFFECT

Effect/Reverb Type Page 3



■ Purpose:

Selects the effect to be applied to the ACCOMP. and/or ORCH. sound when the corresponding EFFECT buttons are turned on (see page 22 of the "Getting Started" manual).

■ Procedure:

The right [-] and [+] buttons step through the effect list effect by effect. For faster selection you can use the left [-] and [+] buttons to directly select the effect categories — Tremolo, Chorus, etc — and then use the right [-] and [+] buttons to select the desired effect within that category.

The Effects are:

1. Tremolo : 1
2. Tremolo : 2

3. Chorus : 1
4. Chorus : 2

5. Flange : 1
6. Flange : 2

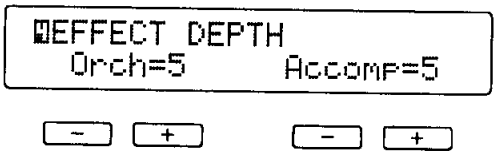
7. Symphony: 1
8. Symphony : 2

■ Notes:

Try out all of the effects to get a feel for what they can do to your sound.

4. EFFECT DEPTH

Effect/Reverb Type Page 4



■ Purpose:

Independently sets the depth of the selected effect for the orchestra and accompaniment sound.

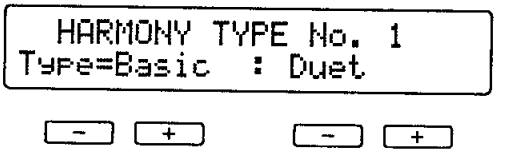
■ Procedure:

Use the [-] and [+] buttons to set the effect depth for each parameter.

■ Notes:

The effect depth range is from "0" to "9". "0" is minimum depth and produces no effect. "9" is maximum depth and produces the most pronounced effect.

[F5] HARMONY TYPE



■ Purpose:

Selects the type of harmony to be applied when the HARMONY button is turned on (see page 21 of the "Getting Started" manual).

■ Procedure:

The right [-] and [+] buttons step through the harmony list one by one. For faster selection you can use the left [-] and [+] buttons to directly select the harmony categories — Basic, Pop, etc — and then use the right [-] and [+] buttons to select the desired harmony type within that category.

The Harmony Types are:

1. Basic : Duet
2. Basic : Trio
3. Basic : 4WayClose
4. Basic : 4WayOpen

5. Pop : Unison
6. Pop : PopRif.
7. Pop : 4th
8. Pop : Strings
9. Pop : Fiddle

10. Jazz : 4WayClose
11. Jazz : 4WayOpen
12. Jazz : VibEns.
13. Jazz : SaxEns.

14. Classic: Strings
15. Classic : Organ

16. Style : Preset

■ Notes:

Try out all of the effects to get a feel for what they can do to your sound. The "Style : Preset" setting produces a type of harmony specifically created for the selected style. Further, a different harmony is produced for the VERSE and CHORUS variations.

[F6] ABC MODE

The [F6] ABC MODE button accesses three pages containing parameters that affect the operation of the ABC accompaniment and Interactive Accompaniment features.

1. ABC MODE

ABC Mode Page 1

■ Purpose:

Selects the Fingered Chord, Single Finger, or Manual Bass mode for ABC Accompaniment.

■ Procedure:

Use the left [-] and [+] buttons to select the "FingeredChord," "SingleFinger," or "M.Bass" mode. Note that when the "M.Bass" mode is selected a new parameter appears to the right of the screen. This is the voice to be played in the manual-bass (left-hand) section of the keyboard. Use the right [-] and [+] buttons to select the desired Manual Bass voice.

■ Notes:

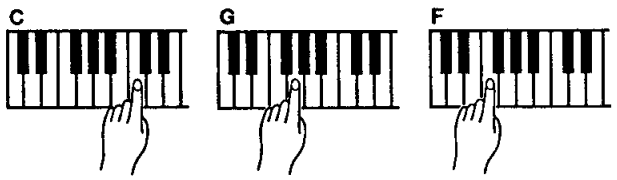
General operation of the Fingered Chord, Single Finger, and Manual Bass ABC modes is as follows:

● Fingered Chord Mode

This is the default ABC mode and its use is described in detail on page 17 of the Getting Started manual. The Fingered mode lets you finger your own chords on the left-hand section of the keyboard, while the PSR-6700 supplies appropriately orchestrated rhythm, bass, and chord accompaniment in the selected style.

● Single Finger Mode

Single-finger accompaniment makes it simple to produce beautifully orchestrated accompaniment using major, seventh, minor and minor-seventh chords by pressing a minimum number of keys on the left-hand section of the keyboard. General operation is the same as the Fingered Chord mode (see page 17 of the Getting Started manual), except that the abbreviated chord fingerings described below are used:



Playing Minor, Seventh, and Minor-seventh Chords in the Single-finger Mode

- For a minor chord, press the root key and a black key to its left.
- For a seventh chord, press the root key and a white key to its left.
- For a minor-seventh chord, press the root key and both a white and black key to its left.

Also note that the split mode (ORCH.2◀▶1) can not be engaged when the Single Finger accompaniment is selected.

● Manual Bass Mode

The Manual Bass mode provides an alternative to the normal split keyboard. The bass voice assigned to the left-hand keyboard section is monophonic. You can select any of the PSR-6700's 100 preset or custom voices to play on the lower section of the keyboard — of course, it's normal to choose a bass voices for the left hand.

2. INTERACTIVE ACCOMP. MODE

ABC Mode Page 2

■ Purpose:

Selects one of two available Interactive Accompaniment modes, and turns the AUTO SOLO function on or off.

■ Procedure:

Use the left [-] and [+] buttons to select IA mode 1 or 2, and use the right [-] and [+] buttons to turn the AUTO SOLO function on or off.

■ Notes:

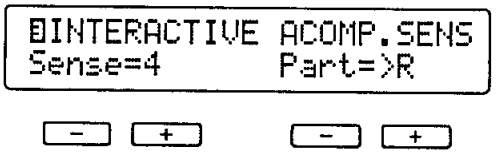
When IA mode 1 is selected, accompaniment parts that may interfere with what is played on the keyboard are

automatically lowered in volume when the keyboard is being played. When IA mode 2 is selected, the above function is combined with automatic muting of interfering parts and automatic switching between VERSE 1 and VERSE 2 or between CHORUS 1 and CHORUS 2 in response to keyboard activity.

When the AUTO SOLO function is turned ON, the solo accompaniment variations will automatically be activated if nothing is played on the keyboard for a few measures (the actual number of measures depends on the selected style). Further, the solo variations will automatically be de-activated at the end of the current phrase after keyboard performance is resumed. No automatic solo switching occurs when the AUTO SOLO function is turned off.

3. INTERACTIVE ACCOMP. SENSE

ABC Mode Page 3



■ Purpose:

Sets the sensitivity of the PSR-6700's Interactive Accompaniment feature, and determines whether Interactive Accompaniment operation is based on what is played in the left-hand section of the keyboard, the right-hand section of the keyboard, or the entire keyboard.

■ Procedure:

Use the left [-] and [+] buttons to set the IA sensitivity, and the right [-] and [+] buttons to specify which sections of the keyboard IA is to be based on.

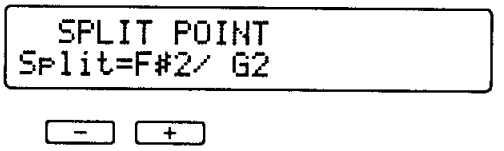
■ Notes:

The sensitivity range is from "1" to "8." "8" is the highest sensitivity. In this case "sensitivity" refers to how much activity the IA system must detect in the specified section(s) of the keyboard before a change in the accompaniment occurs.

General operation of the Interactive Accompaniment feature is described on page 20 of the Getting Started manual.

When the "PART" parameter is set to "L+R", the IA system responds to activity (i.e. anything you play) on the entire keyboard. When set the ">R" only activity on the right-hand section of the keyboard is detected, and when set to "L<" only activity on the left-hand section of the keyboard is detected.

[F7] SPLIT POINT



■ Purpose:

Sets the split point for the ORCH.2◄►1 and ABC accompaniment modes.

■ Procedure:

Use the left [-] and [+] buttons to set the split point.

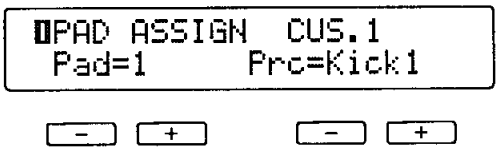
Another way to set the split point is to press the key that is to be the highest key in the left-hand range — when this is done the SPLIT POINT function is automatically exited.

■ Notes:

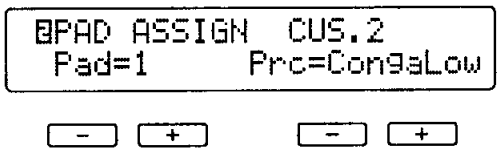
The key name to the left of the slash represents the highest note in the left-hand range, and the key name to the right of the slash represents the lowest note in the right-hand range.

[F8] PAD ASSIGN

1



2



3

■ Purpose:

Assigns any of the PSR-6700 drums, percussion instruments, and sound effects to the percussion pads for each CUSTOM PAD set.

■ Procedure:

Use the [▲] and [▼] buttons to select CUSTOM set 1, 2, or 3. The different CUSTOM sets can also be selected by pressing the appropriate PAD [CUSTOM 1], [CUSTOM 2], or [CUSTOM 3] button. The number of the selected CUSTOM set will appear to the right of the upper display line.

Use the left [-] and [+] buttons to specify a pad between 1 and 8, or press the desired pad directly, then use the right [-] and [+] buttons to assign the desired drum, percussion instrument, or sound effect to that pad. Instruments can also be assigned by pressing the appropriate instrument key (keyboard percussion).

Continue until all 8 pad assignments have been made as required.

■ Notes:

Here's a list of the available drums, percussion instruments, and sound effects:

Perc. instrument list

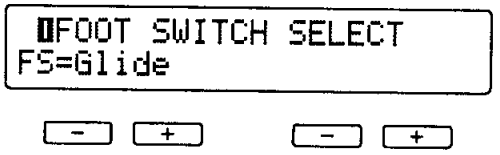
Key	Instrument	Key	Instrument
E0	Bird 1	F3	Open Hi-Hat Hi
F0	Bird 2	F♯3	Conga Low
F♯0	Rooster	G3	Ride Cymbal
G0	Car Horn	A♭3	Conga Hi
A♭0	Scratch Noise Low	A3	Ride Cup
A0	Train	B♭3	Conga Mute
B♭0	Scratch Noise Hi	B3	Crash Cymbal 1
B0	Dropping Coin	C4	Crash Cymbal 2
C1	Running Water	D♭4	Bongo Low
D♭1	Laugh	D4	Splash Cymbal
D1	Woo!	E♭4	Bongo Hi
E♭1	Yeah!	E4	Reverse Cymbal
E1	Applause	F4	E.Tom Bass
F1	Kick 1	F♯4	Shaker
F♯1	Kick 2	G4	E.Tom Low
G1	Kick 3	A♭4	Surdo
A♭1	Kick 4	A4	E.Tom Mid
A1	Tom Bass	B♭4	Claves
B♭1	Rim Shot	B4	E.Tom Hi
B1	Tom Low	C5	Snare Brush Shot
C2	Tom Mid	D♭5	Cuica Low
D♭2	Snare 1	D5	Snare Brush Squeeze
D2	Tom Hi	E♭5	Cuica Hi
E♭2	Snare 2	E5	Snare Roll
E2	Snare 3	F5	Cowbell Low
F2	Snare 4	F♯5	Agogo Low
F♯2	Snare 5	G5	Cowbell Hi
G2	Snare 6	A♭5	Agogo Hi
A♭2	Tabla Low	A5	Tambourine
A2	Snare 7	B♭5	Castanet
B♭2	Tabla Hi	B5	Triangle Close
B2	Pedal Hi-Hat	C6	Triangle Open
C3	Closed Hi-Hat Low	D♭6	Whistle Low
D♭3	Timbales Low	D6	Finger Snaps
D3	Open Hi-Hat Low	E♭6	Whistle Hi
E♭3	Timbales Hi	E6	Hand Claps
E3	Closed Hi-Hat Hi	F6	Cross Sticks

[F9] FOOT SW/EXP. PEDAL SELECT

The [F9] function button accesses two pages — one to assign a range of functions to the footswitch and the second to determine how an expression pedal plugged into the EXP. PEDAL jack affects the various parts.

1. FOOT SWITCH SELECT

Foot SW/EXP. Pedal Select Page 1



■ Purpose:

Determines the function of a footswitch plugged into the rear-panel FOOT SW jack.

■ Procedure:

Use the left [-] and [+] buttons to select one of the following footswitch functions:

Glide	Lower orchestra 1 sound by a semitone.
Harmony	Harmony occurs only while footswitch pressed.
Punch In	Sets punch-in and punch-out points when sequencer record mode set to "Punch."
Tension	Modifies dominant 7th chords in the accompaniment to produce a more consistent sound when playing in a minor key. Also automatically re-harmonizes non-scale tones on chords other than the tonic and 7th.
Perc.	Footswitch plays a percussion voice (see "Notes").
StartStop	Same as panel [START] and [STOP] buttons.
I/Fill 1	Same as panel [INTRO.→V1/FILL IN] button.
I/Fill 2	Same as panel [INTRO.→V2/FILL IN] button.
I/Ending	Same as panel [INTRO.→C1/ENDING] button.
V.Regist. +	Recall next (increment) voice registration.
P.Regist. +	Recall next (increment) panel registration.

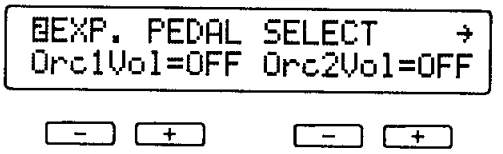
■ Notes:

When the "Perc" setting is selected a new parameter appears to the right of the screen. This allows you to select the drum, percussion instrument, or sound effect that will be played when the footswitch is pressed.

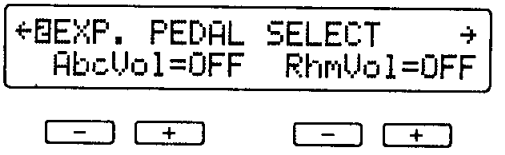
2. EXP. PEDAL SELECT

Foot SW/EXP. Pedal Select Page 2

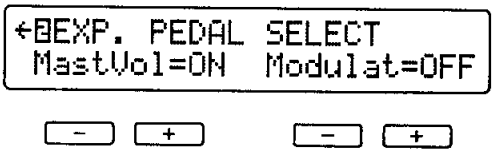
1



2



3



■ Purpose:

Determines which of the PSR-6700's parts (orchestra, rhythm, etc.) an expression pedal plugged into the rear-panel EXP. PEDAL jack will control.

■ Procedure:

Use the [◀] and [▶] buttons to switch between the three display screens. Use the [-] and [+] buttons below each parameter to turn expression control on or off:

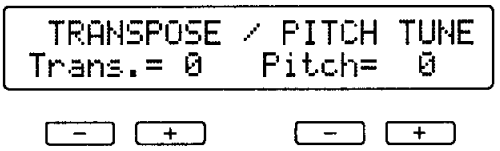
Orch1Vol	Orchestra 1 volume control.
Orch2Vol	Orchestra 2 volume control.
AbcVol	ABC accompaniment volume control.
RhmVol	Rhythm volume control.
MastVol	Master volume control.
Modulat	Modulation (same as modulation wheel).

■ Notes:

Normally you'll want to be able to apply expression control to the orchestra voices without affecting the accompaniment and rhythm sound, so "Orch1Vol" should be turned on while the remaining parameters are turned off.

Modulation and volume cannot be controlled at the same time.

[F10] TRANSPOSE/TUNE



■ Purpose:

Allows the overall pitch of the PSR-6700 to be transposed up or down in semitone increments. Also allows fine tuning of overall pitch in approximately 3-cent increments.

■ Procedure:

Use the left [-] and [+] buttons to set the desired degree of transposition, and the right [-] and [+] buttons to set the desired degree of tuning.

■ Notes:

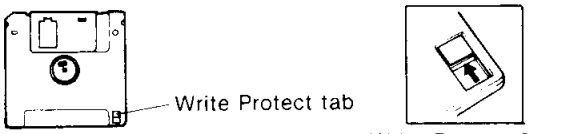
The transpose range is from -6 to +6, allowing a maximum upward or downward transposition of 1/2-octave. A setting of 0 produces the normal pitch.

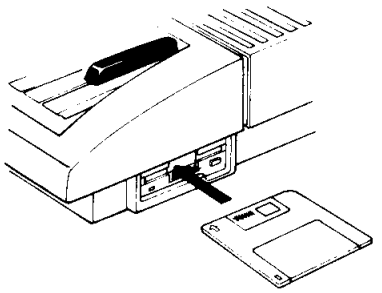
The pitch range is from -16 to +16. Each increment corresponds to approximately 3 cents, thus allowing tuning over a 100-cent (±50 cents) range. 100 cents equals one semitone.

THE [TO DISK] AND [

Although the [F11] DISK function button (page 43) accesses a range of important functions, the most commonly used disk functions — save to disk and load from disk — can also be directly accessed via the [TO DISK] and [FROM DISK] buttons, as described below.

For any disk operation an appropriate floppy disk must first be properly inserted into the PSR-6700 disk drive. The PSR-6700 uses only 3.5" 2DD type floppy disks. Make sure the disk write protect tab is set to the "write enable" position if you intend to save any data to the disk, and insert the disk with the sliding disk cover facing the disk drive and the disk label facing upward. Before a new disk can be used to save data, it must be formatted using the "FORMAT DISK" function described on page 45.

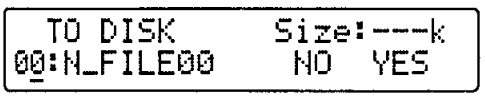




[FROM DISK] BUTTONS

The [TO DISK] Button

Press this button when you want to save the current contents of the PSR-6700 memory (see list below) to floppy disk for later re-loading and use. The display shown to the left will appear:



With the underline cursor located under the file number parameter at the left of the lower display line (use the [▶] button to move the cursor if necessary), use the left [-] and [+] buttons to specify a number for the file to be saved (00 — 99). If a file with the selected number already exists on the disk, the name of the selected file will be displayed to the right of the number (if no name has been assigned, "N_FILE" will appear), and the size of the file in kilobytes (approximate) will be shown on the upper display line. New files have a "0" size. The cursor can be moved to the various character positions in the file name and the name edited by selecting the appropriate characters for each position via the left [-] and [+] buttons.

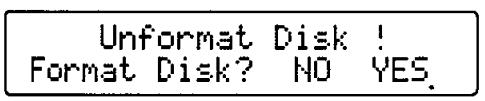
When the file number has been specified, press the right [+] button under "YES" on the display to execute the save operation (or press the [-] button under "NO" on the display to cancel the operation). "Don't remove disk" will appear while the data is being saved, and the amount of remaining data to be saved will be displayed in kilobytes (approximate) on the upper display line. "Completed!" will appear when the data has been successfully saved.

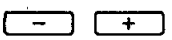
The data saved to disk is as follows:

- Instrument setup (condition) data.
- Disk style data.
- Custom voice data.
- Custom accompaniment data.
- Voice registration data.
- Panel registration data.
- Percussion pad assignment data.
- Sequencer song data.

See page 45 for a list of error messages that may appear during disk save.

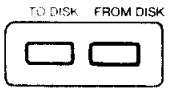
If you insert a disk that has not been formatted into the drive, the display shown to the left will appear when the [TO DISK] button is pressed:





Press the [+] button under "YES" on the display to format the disk (see "6. FORMAT DISK" on page 45).

The [FROM DISK] Button



Press this button when you want to re-load a previously saved file from floppy disk. The data loaded is the same as that saved by the TO DISK operation described above. When the [FROM DISK] button is pressed the display shown to the left will appear:

Use the left [-] and [+] buttons to select the number of the file to load (00 — 99). The name of the selected file will be displayed to the right of the number, and the size of the file in kilobytes (approximate) will be shown on the upper display line.

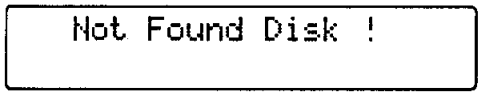
When the file number has been specified, press the right [+] button under "YES" on the display to execute the load operation (or press the [-] button under "NO" on the display to cancel the operation). "Don't remove disk" will appear while the data is being loaded, and the amount of remaining data to be loaded will be displayed in kilobytes (approximate) on the upper display line. "Completed!" will appear when the data has been successfully loaded.

The [FROM DISK] button allows all data in a file to be loaded at once. To load individual data groups use the FROM DISK function described on page 43.

See page 45 for a list of error messages that may appear during a disk load operation.

[F11] DISK

The [F11] DISK function button accesses a range of functions that are used for storage and retrieval of floppy disk data.



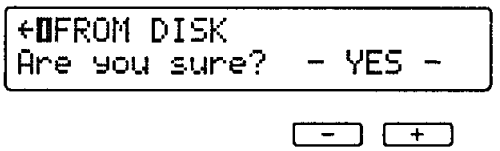
If you press the [F11] when no disk is present in the drive, the "Not Found Disk!" error message will appear on the display.

1. FROM DISK

Disk Page 1

1

2



■ Purpose:

Loads the specified file from a floppy disk inserted into the PSR-6700 disk drive.

■ Procedure:

Use the left [-] and [+] buttons to select the number of the file to load (00 — 99). The name of the selected file will be displayed to the right of the number, and the size of the file in kilobytes (approximate) will be shown on the upper display line. The right [-] and [+] buttons can be used to select the type of data to be loaded, as shown in "Notes:" below.

When the file and data type have been specified, press the [▶] button to select the second display screen, and press the right [-] and [+] buttons under "-YES-" on the display simultaneously to execute the load operation. "Don't remove disk" will appear while the data is being loaded, and the amount of remaining data to be loaded will be displayed in kilobytes (approximate) on the upper display line. "Completed!" will appear when the data has been successfully loaded.

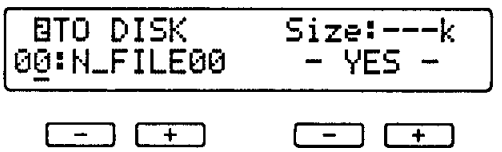
■ Notes:

The following data types can be selected for loading:

AllData	All of the below.
SetUp	Instrument setup (condition) data.
DiskStyle	Disk style data.
Cus.Voice	Custom voice data.
Cus.Acomp	Custom accompaniment data.
V.Regist	Voice registration data.
P.Regist	Panel registration data.
PadAssign	Percussion pad assignment data.
Sequencer	Sequencer song data.

2. TO DISK

Disk Page 2



■ Purpose:

Saves the data listed in "Notes:," below, to a floppy disk inserted into the PSR-6700 disk drive.

■ Procedure:

With the underline cursor located under the file number parameter at the left of the lower display line (use the [▶] button to move the cursor if necessary), use the left [-] and [+] buttons to select the number of the file to save (00 — 99). If a file with the selected number already exists on the disk, the name of the selected file will be displayed to the right of the number (if no name has been assigned, "N_ FILE" will appear), and the size of the file in kilobytes (approximate) will be shown on the upper display line. New files have a "0" size. The cursor can be moved to the various character positions in the file name by using the [◀] and [▶] buttons, and the name can be edited by selecting the appropriate characters for each position via the left [-] and [+] buttons.

When the file number has been specified, press the right [-] and [+] buttons under "-YES-" on the display simultaneously to execute the save operation. "Don't remove disk" will appear while the data is being saved, and the amount of remaining data to be saved will be displayed in kilobytes (approximate) on the upper display line. "Completed!" will appear when the data has been successfully saved.

■ Notes:

The following data are saved to disk when the save operation is executed:

- Instrument setup (condition) data.
- Disk style data.
- Custom voice data.
- Custom accompaniment data.
- Voice registration data.
- Panel registration data.
- Percussion pad assignment data.
- Sequencer song data.

All data is saved in one operation. Specific data types can not be saved individually.

3. DISK STATUS

Disk Page 3

■ Purpose:

Shows the name and size of a file having the specified file number, and the amount of remaining free space on the disk.

■ Procedure:

Use the left [-] and [+] buttons to specify the number of the file. The name of the selected file will be displayed to the right of the number, and the size of the file in kilobytes (approximate) will be shown to the right of the file name. The amount of space remaining on the disk in kilobytes (approximate) will be shown on the upper display line.

■ Notes:

It's always a good idea to label your disks, but if you lose track of what's on a disk, this function provides a convenient way to find out what files it contains and how big they are.

4. RENAME FILE

Disk Page 4

■ Purpose:

Allows the name of the file having the specified file number to be changed as required.

■ Procedure:

With the underline cursor located under the file number parameter at the left of the lower display line (use the [▶] button to move the cursor if necessary), use the left [-] and [+] buttons to select the number of the file (00 — 99). The current name of the selected file will be displayed to the right of the number, and the size of the file in kilobytes (approximate) will be shown on the upper display line. The cursor can be moved to the various character positions in the file name and the name edited by selecting the appropriate characters for each position via the left [-] and [+] buttons.

When the new file name has been entered, press the right [-] and [+] buttons under "-YES-" on the display simultaneously to register the new name.

Character List

[Space]!#$%&'()-0123456789@ABCDE
FGHIJKLMNOPQRSTUVWXYZ^_{}

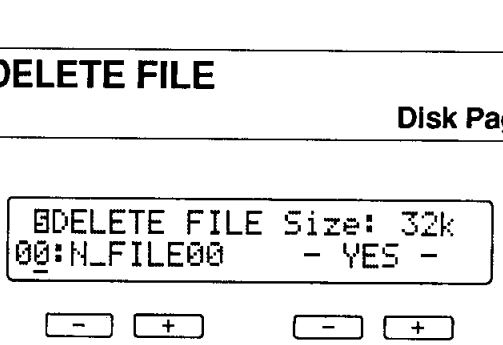
■ Notes:

This function lets you change the name of a file without having to re-load and then re-save the entire file with a new name.

Since the PSR-6700 uses the file number rather than the file name to recognize and manage data files, a file saved with the same number as another file will overwrite that file even if it has a different name.

5. DELETE FILE

Disk Page 5



■ Purpose:

Deletes the specified file from the disk.

■ Procedure:

Use the left [-] and [+] buttons to select the number of the file to be deleted (00 — 99). The name of the selected file will be displayed to the right of the number, and the size of the file in kilobytes (approximate) will be shown on the upper display line.

When the file number has been specified, press the right [-] and [+] buttons under "-YES-" on the display simultaneously to delete the file.

■ Notes:

Files deleted from disk can not be restored (there is no "Undo" function), so be sure you've selected the right file number before actually executing the delete operation.

6. FORMAT DISK

Disk Page 6

■ Purpose:

Formats a new floppy disk for use with the PSR-6700.

■ Procedure:

After inserting a new floppy disk into the disk drive, press the right [-] and [+] buttons under "-YES-" on the display simultaneously to begin formatting. "Don't remove disk" will appear while the disk is being formatted, and the number of remaining tracks to be formatted will be shown on the upper display line.

■ Notes:

The PSR-6700 uses only 3.5" 2DD type floppy disks.

● DISK ERROR MESSAGES

If an error is encountered when a disk operation is executed, one of the following error messages may appear:

"Type Error or Unformat!"
The disk in the drive has not been formatted for use with the PSR-6700.

"Not Found File!"
The disk does not contain any files saved by the user.

"Write Protect on !"
The disk write protect tab is in the write disable position.

"Unformat Disk!"
The disk in the drive has not been formatted or the disk is the wrong type or has the wrong format.

"Disk Error!"
Data error.

"Disk Full!"
The disk is full.

"Sample Data Disk!"
The supplied data disk is in the drive.

"Not Found Disk!"
No disk in drive.

"Bad File Name!"
The file name is all spaces.

Some of the error displays automatically revert to the previous display after a few seconds, while others require that the right [-] and [+] buttons under "-QUIT -" on the display be pressed simultaneously to exit from the error display.

If a damaged disk is used the data countdown during FROM DISK or TO DISK operations may stop and the load or save operation may get "hung up." In this case, eject the disk from the drive even though the DISK IN USE lamp may be on. Discard the damaged disk.

[F12] UTILITY

The [F12] UTILITY button accesses four pages containing parameters that allow the sustain and pitch bend effects to be assigned to orchestra voices 1 and 2, turn memory backup on or off, and recall the PSR-6700's initial factory preset data.

1. SUSTAIN ASSIGN

Utility Page 1

■ Purpose:

Determines whether the PSR-6700 sustain effect is to be applied to the orchestra 1 voice, the orchestra 2 voice, or both orchestra voices.

■ Procedure:

Use the left [-] and [+] buttons to turn sustain on or off for the orchestra 1 voice, and the right [-] and [+] buttons to turn sustain on or off for the orchestra 2 voice.

■ Notes:

The sustain effect is applied to the specified orchestra part(s) only when the panel [SUSTAIN] button is turned on or when the sustain pedal is pressed.

2. PITCH BEND ASSIGN

Utility Page 2

■ Purpose:

Determines whether the pitch wheel will affect the orchestra 1 voice, the orchestra 2 voice, or both orchestra voices.

■ Procedure:

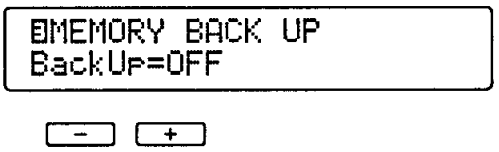
Use the left [-] and [+] buttons to turn pitch wheel control on or off for the orchestra 1 voice, and the right [-] and [+] buttons to turn pitch wheel on or off for the orchestra 2 voice.

■ Notes:

If, for example, you're using the split mode (ORCH. 2◀▶1) with a bass voice on the left and a sax voice on the right, you'll want pitch bend to apply only to the right-hand sax voice. In this case simply turn orchestra 1 pitch bend on and orchestra 2 pitch bend off.

3. MEMORY BACKUP

Utility Page 3



■ Purpose:

Turns memory backup on or off.

■ Procedure:

Use the left [-] and [+] buttons to turn memory backup on or off.

■ Notes:

The data backed up (retained in memory even when the power is turned off) by the PSR-6700 are as follows:

Data Backup Up When MEMORY BACKUP is ON

- Part Select
- Orchestra 1 Voice
- Orchestra 2 Voice
- Orchestration
- Harmony On/Off
- Sustain On/Off
- Key Velocity On/Off
- Reverb Orchestra On/Off
- Reverb Accompaniment On/Off
- Reverb Rhythm On/Off
- Effect Orchestra On/Off
- Effect Accompaniment On/Off
- Style
- ABC On/Off
- IA On/Off
- Style Section (VERSE1/2, CHORUS 1/2)
- Solo On/Off

- Pad Custom Select (1, 2, 3)
- Pad Synchro Break On/Off
- Keyboard Percussion On/Off
- Orch. 2 Hold On/Off
- Custom Accompaniment Data
- Custom Voice Data
- Disk Style Data
- Panel Registration Memory Data
- Voice Registration Memory Data
- Reverb Type
- Reverb Depth (Orchestra/Accompaniment/Rhythm)
- Effect Type
- Effect Depth (Orchestra/Accompaniment)
- Harmony Type
- ABC (FC/SF/MB)
- Manual Bass Voice
- IA Mode & Sensitivity
- Split Point
- Pad Assign Data
- Foot Switch Assign Data
- Expression Pedal Assign Data
- Transpose Data
- Pitch Tune
- Sustain Assign
- Pitch Bend Assign
- Memory Backup On/Off
- MIDI Transmit Ch
- MIDI Receive Ch
- MIDI Split Orch.2 Ch
- MIDI Rhythm Receive Ch
- MIDI Sequencer Ch
- MIDI Multi Part Ch
- MIDI Multi Part Volume
- MIDI Multi Part Voice
- MIDI Standard Voice Ch On/Off
- MIDI Switch (Modulation, Foot Controller, Volume, Pan, Sustain, Pitch Bend, Program Change, System Exclusive)
- MIDI Clock
- MIDI Local On/Off
- MIDI Transpose Add Note
- MIDI Split Send On/Off, Enable

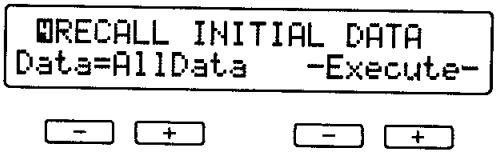
** The above data will be retained in memory for about one week even if the power is not turned on. To retain the backed up data for longer periods, turn the power switch ON for a few minutes at least once a week.*

Data Backup Up When MEMORY BACKUP is OFF

- Custom Accompaniment Data
- Custom Voice Data
- Disk Style Data
- Panel Registration Memory Data
- Voice Registration Memory Data

4. RECALL INITIAL DATA

Utility Page 4



■ Purpose:

Recalls all initial factory settings.

■ Procedure:

Press both the right [-] and [+] buttons simultaneously. "Busy!" will appear while the initialization is taking place, and "Completed!" will appear when the initialization is complete.

■ Notes:

All current data corresponding to the parameters listed below will be erased when the initial data is recalled.

Here's a list of the data initialized by this function:

Data Initialized by the RECALL INITIAL DATA Function

AllData	All Data
V.Regist	Voice Registration Memory Data
P.Regist	Panel Registration Memory Data
ABC Mode	ABC Mode
CusVoice	Custom Voice Data
FootSw	Foot Switch Assign Data
Exp.Pedal	Expression Pedal Assign Data
PadAssign	Pad Assign Data
HarmoType	Harmony Type Data
Effect	Effect Type, Depth
Reverb	Reverb Type, Depth
Split	Split Point
PitchBend	Pitch Bend Range
MidiSndCh	MIDI Transmit Ch
MidiRcvCh	MIDI Receive Ch
MidiSplCh	MIDI Split Orch. 2 Ch
MidiRhmCh	MIDI Rhythm Receive Ch
MidiMulti	MIDI Multi Part Ch, Voice, Volume
MidiSw	MIDI Switch
MidiSys.	MIDI System

[F13] MIDI

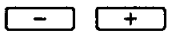
MIDI, the Musical Instrument Digital Interface, is a world-standard communication interface that allows MIDI-compatible musical instruments and equipment to share musical information and control one another. This makes it possible to create "systems" of MIDI instruments and equipment that offer far greater versatility and control than is available with isolated instruments.

The PSR-6700 offers a range of MIDI functions that allow it to be used in even sophisticated MIDI systems.

• Always use a high-quality MIDI cable to connect MIDI OUT to MIDI IN terminals. Never use MIDI cables longer than about 15 meters, since cables longer than this can pick up noise which can cause data errors.

1. MODE SELECT

MIDI Page 1



■ Purpose:

Selects the MIDI Remote Control or PK Standard Voice mode.

■ Procedure:

Use the left [-] and [+] buttons to select the "Remote Control" or "PK Standard Voice" mode.

■ Notes:

Operation in the Remote Control and PK Standard Voice modes is as follows:

• Remote Control Mode

The Remote Control mode is the normal operation mode for the PSR-6700. In this mode the PSR-6700 recognizes and responds to MIDI key on/off, voice selection, sustain, volume, pitch bend, and other parameters received via the MIDI IN connector on the MIDI receive channel specified in MIDI mode page 2. Further, the PSR-6700 rhythm sounds can be controlled via the specified rhythm receive channel (see page 49). It is also possible to control 8 different voices via different MIDI channels, as specified in MIDI mode page 3 (see page 50). This "multi-part" receive capability makes it possible to play melody parts from an external MIDI controller or sequencer while the internal ABC system provides accompaniment.

• PK Standard Voice Mode

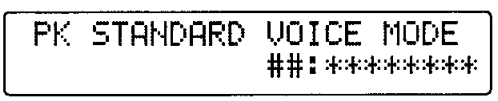
In this mode the PSR-6700 is effectively "disconnected" from the internal tone generator system ("local off" status) — playing the keys produces no sound from the PSR-6700. The PSR-6700 can, however, be used as a "master keyboard" to control external tone generators or other MIDI devices, while the internal tone generator can be controlled from an external MIDI controller (another keyboard, for example), sequencer, or MIDI computer, etc.

The voice controlled on a specific MIDI channel is selected by transmitting the appropriate program change message via that channel (see the "MIDI DATA FORMAT" beginning on page 218 for data details).

Other PK Standard Voice Mode conditions include:

- Automatic accompaniment functions do not operate.
- Only the 100 preset PK Standard Voice Mode voices can be controlled (these are different from the panel presets).
- Reception can be independently turned on or off for all 16 MIDI channels (see page 50).
- MIDI real time messages are ignored.
- Program change messages are not recognized on the rhythm channel.
- Pitch bend data permits pitch control by ±200 cents.
- Of the MIDI system messages, only active sensing and certain types of exclusive data will be received.

If the MIDI mode is exited by pressing the [EXIT] button while the PK Standard Voice mode is selected, a display similar to following will appear in place of the normal play mode display:

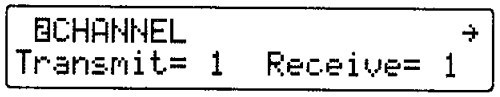


"##" in the above display is the transmitted voice number and "********" is the corresponding voice name.

2. CHANNEL

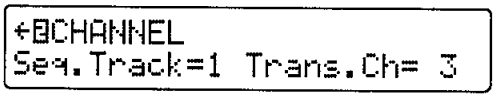
MIDI Page 2

1



2

3



■ Purpose:

Sets the basic transmit, basic receive, split transmit, rhythm receive, and individual sequencer track transmit channels.

■ Procedure:

In the first display screen the left [-] and [+] buttons select the basic transmit channel (1 ... 16) and the right [-] and [+] buttons select the basic receive channel (1 ... 16, All).

In the second display screen the left [-] and [+] buttons select the split (left-hand) transmit channel (1 ... 16) and the right [-] and [+] buttons select the rhythm receive channel (1 ... 16).

In the third display screen the left [-] and [+] buttons select a sequencer track number (1 ... 7) and the right [-] and [+] buttons select the transmit channel (1 ... 16) for that track.

■ Notes:

The various channel settings are as follows:

• Transmit

This setting is the same in the Remote Control and PK Standard Voice modes. It determines the basic channel on which all PSR-6700 data will be transmitted.

• Receive

The receive channel setting is the same in the Remote Control and PK Standard Voice modes, except that in the PK Standard Voice Mode only MIDI system exclusive messages will be received. The receive channel is the basic channel on which the PSR-6700 will receive all MIDI data. If set to "All," data can be received via all 16 MIDI channels.

• SplitTrn

The split transmit channel functions only in the Remote Control mode. This is the channel on which left-hand performance data (i.e. data produced by playing keys to the left of the split point) will be transmitted. Right-hand performance data is transmitted on the basic transmit channel specified in the first display screen.

• RhmRcv

This setting is the same in the Remote Control and PK Standard Voice modes. It specifies an independent MIDI channel via which the PSR-6700's rhythm (drums, percussion, and sound effects) can be controlled. This means you can, for example, play the selected voice via the basic receive channel while simultaneously playing the rhythm instruments via a different channel (i.e. the RhmRcv channel).

• Seq.Track/Trans.Ch

This setting only applies when the Remote Control Mode is selected. Separate transmit channels can be set for sequencer tracks 1 through 7 (the ACCOMP. track does not transmit) so the PSR-6700 sequencer can be used to drive an external multi-timbre tone generator or multiple tone generators via the specified channels.

If a specified transmit or receive channel is the same as that specified for any other parameter, an exclamation mark "!" will appear to the right of the channel number.

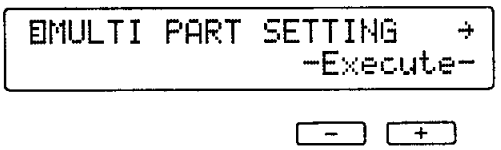
3. MULTI PART SETTING/ CH ON/OFF in ST.VOICE

MIDI Page 3

The contents of this page are different depending on whether the Remote Control mode or the PK Standard Voice mode is selected.

● Remote Control Mode: MULTI PART SETTING

1



2

3

■ Purpose:

Allows the receive channel, volume, and voice to be independently specified for 8 separate "parts" to be controlled from an external MIDI device.

■ Procedure:

In the second display screen use the left [-] and [+] buttons to select a part number (1 ... 8) and the right [-] and [+] buttons select the receive channel (1 ... 16, Off) for that part.

In the third display screen the right [-] and [+] buttons select the voice for the currently selected part number in the second display screen, while the left [-] and [+] buttons set the volume of the voice.

When the receive channels, voices, and volume values have been set as required for all 8 parts, return to the first display screen and press the right [-] and [+] buttons under "-Execute-" simultaneously. This actually registers the multi-part settings — "Completed" appears when the settings have been registered.

■ Notes:

Note that parts that are not required can be turned "OFF" via the "Channel" parameter in the second display screen.

If the channel number of any part is set to the same channel number as a lower-numbered part, the "!OFF" display will appear and that part will be turned off.

Any of the 100 preset or 100 custom voices can be specified via the voice parameter in the third display screen.

● PK Standard Voice Mode: CH ON/OFF in ST.VOICE

■ Purpose:

Allows reception to be independently turned on or off for all 16 MIDI channels.

■ Procedure:

Use the left [-] and [+] buttons to select a receive channel (1 ... 16) and the right [-] and [+] buttons turn reception via that channel on or off.

■ Notes:

It is a good idea to turn channels that you won't be using "OFF."

4. MIDI SWITCH 1

MIDI Page 4

1

2

3

■ Purpose:

Allows reception and transmission of modulation wheel, foot controller, volume, pan (receive only), and sustain data to be independently turned on or off.

■ Procedure:

Use the [◀] and [▶] buttons to switch between display screens, and the [-] and [+] buttons below each parameter to turn reception/transmission of the corresponding MIDI data on or off.

■ Notes:

These "switches" can be used to determine how the PSR-6700 responds to MIDI data received from external equipment. If, for example, you don't want the modulation wheel on a second keyboard you are using to control the PSR-6700 to affect the PSR-6700 tone generator, simply turn the modulation wheel parameter "OFF." The same applies to transmission from the PSR-6700 — turn off data that you don't want to be transmitted to external equipment.

5. MIDI SWITCH 2

MIDI Page 5

1

2

■ Purpose:

Allows reception and transmission of pitch bend, program change, and system exclusive data to be independently turned on or off.

■ Procedure:

Use the [◀] and [▶] buttons to switch between display screens, and the [-] and [+] buttons below each parameter to turn reception/transmission of the corresponding MIDI data on or off.

■ Notes:

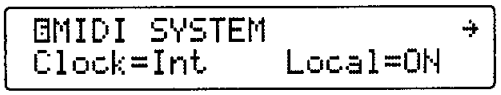
Like the switches in MIDI page 4, these can be used to determine how the PSR-6700 responds to MIDI data received from external equipment. If, for example, you don't want the PSR-6700 voices to be changed by program change messages received from an external device, turn the program change switch "OFF."

The same applies to transmission from the PSR-6700 — turn off data that you don't want to be transmitted to external equipment.

6. MIDI SYSTEM

MIDI Page 6

1



2

3

■ Purpose:

These three display screens provide access to a number of important MIDI system "switches" — internal or external clock synchronization, local control on/off, transpose data transmission on/off, and split mode data transmission on/off.

■ Procedure:

Use the [◀] and [▶] buttons to switch between display screens, and the [-] and [+] buttons below each parameter to select the desired state for each parameter.

■ Notes:

The various system parameters operate as follows:

• Clock

The "Int" (internal) clock setting is the normal setting when the PSR-6700 is being used alone. If you are using the PSR-6700 with an external sequencer, MIDI computer, or other MIDI device, and you want the PSR-6700 to be synchronized to the external device, set this function to "Ext" (external). In the latter case, the external device must be connected to the PSR-6700 MIDI IN connector, and must be transmitting an appropriate MIDI clock signal.

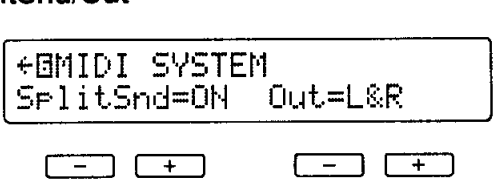
• Local

"Local Control" refers to the fact that, normally, the PSR-6700 keyboard controls its internal tone generator, allowing the internal voices to be played directly from the keyboard. This situation is "Local Control ON" since the internal tone generator is controlled locally by its own keyboard. Local control can be turned off, however, so that the PSR-6700 keyboard does not play the internal voices, but the appropriate MIDI information is still transmitted via the MIDI OUT connector when notes are played on the keyboard. At the same time, the internal tone generator responds to MIDI information received via the MIDI IN connector. This means that while an external sequencer or MIDI computer, for example, plays the PSR-6700's internal voices, an external tone generator can be played from the PSR-6700 keyboard.

• TransposeAddNote

When this parameter is turned "OFF", the transmitted MIDI note data will not be affected by the PSR-6700 transpose setting. When "ON," the transmitted notes will be transposed in accordance with the PSR-6700 transpose setting. The reverse is true for reception: when "ON" received note data is not transposed; when "OFF" received note data is transposed.

• SplitSnd/Out



When the SplitSnd (split send) parameter is turned on, the setting of the Out parameter determines whether MIDI note data from the left-hand, right-hand, or both sections of the keyboard are transmitted via the MIDI OUT connector. You could choose to transmit only the right-hand data so that only notes played on the right-hand section of the keyboard are reproduced via an external tone generator, for example.

7. PANEL DATA TRANSMIT

MIDI Page 7

■ Purpose:

Transmits the current PSR-6700 panel settings via the MIDI OUT connector.

■ Procedure:

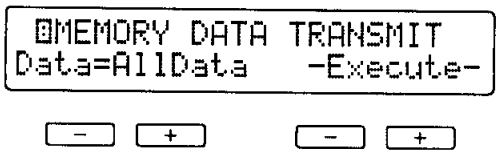
Press both the right [-] and [+] buttons under "-Execute-" on the display simultaneously to begin panel data transmission. "Completed!" will appear on the screen when the transmission is finished.

■ Notes:

This function can be used to transfer all panel settings to a second PSR-6700. It is also useful if you will be recording performances to a MIDI sequencer which will be used to control the PSR-6700 on playback. By transmitting the PSR-6700 panel settings and recording them on the MIDI sequencer prior to the actual performance data, the PSR-6700 will be automatically restored to the same settings when the performance is played back.

8. MEMORY DATA TRANSMIT

MIDI Page 8



■ Purpose:

Transmits the specified data via the MIDI OUT connector.

■ Procedure:

Use the left [-] and [+] buttons to select the type of data to be transmitted (see "Notes:" below), then press both the right [-] and [+] buttons under "-Execute-" on the display simultaneously to begin transmission. A bar graph display will indicate the approximate amount of data sent during transmission, and "Completed!" will appear on the screen when the transmission is finished.

■ Notes:

The data types that can be selected for a transmission are as follows:

AllData	All data.
SetUp	System setup data (including MIDI setup data).
VRegist	Voice registration data.
PRegist	Panel registration data.
PadAss	Pad assignment data.
CusVoic	Custom voice data.
CusAcmp	Custom accompaniment data.
Sequenc	Sequencer data.

The selected data is transmitted as a MIDI bulk dump that can be automatically received by a second PSR-6700 or other compatible MIDI device.

● MIDI Bulk Dump Reception (Memory Data Receive)

The PSR-6700 can receive bulk data transmitted by a second PSR-6700 as long as it is not accessing disk data. When a bulk dump is received the following display will appear:

The bar graph roughly indicates the progress of the bulk dump reception operation. "Completed!" will appear on the display when the data has been successfully received.

If an error is encounted during bulk reception, a "CHECK SUM DATA ERROR !", "END OF EXCLUS ERROR !", or "HEADER DATA ERROR!" error message will appear for a few seconds and the receive operation will be terminated. In the case of a "CHECK SUM DATA ERROR !" or "END OF EXCLUS ERROR !", the setup and panel data will be the same as they were before the bulk data was received, while all other data will be initialized. In the case of a "HEADER DATA ERROR!", all data will be left unaltered.

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MIDI DATA FORMAT / MIDI-DATENFORMAT / FORMAT DES

If you're already very familiar with MIDI, or are using a computer to control your music hardware with computer-generated MIDI messages, the data provided in this section can help you to control the PSR-6700.

Falls Sie bereits mit MIDI vertraut sind oder einen Computer zur Hardware-Steuerung einsetzen, werden Ihnen die nachfolgend aufgeführten Daten bei der Steuerung des PSR-6700 wahrscheinlich hilfreich sein.

Les données suivantes seront utiles à ceux et celles qui sont très familiers avec l'interface MIDI, ou qui utilisent un ordinateur pour commander le matériel de musique au moyen de méssages MIDI générés par ordinateur, et les aideront à commander le PSR-6700.

Si ya está muy familiarizado con MIDI, o si está usando una computadora para controlar su hardware musical con mensajes MIDI generados por computadora, los datos suministrados en esta sección pueden ayudarle a controlar la PSR-6700.

● NOTE ON/OFF

DATA FORMAT: [9nH] -> [kk] -> [vv]

9nH = Note on/off event (n = channel number)
kk = key note number
vv = velocity (1...7FH, 0 = key off)

Note off (receive only) also recognized: [8nH] -> [kk] -> [vv]. Velocity value ignored.

● CONTROL CHANGE

DATA FORMAT: [BnH] -> [cc] -> [vv]

BnH = Control event [n channel number)
cc = Control number
vv = Control value

cc	Parameter	vv
0	Bank Select MSB	00H
1	Modulation Wheel	00H (min)...7FH (max)
7	Main Volume	00H (min)...7FH (max)
10	Pan	00H (L)...7FH (R), 5 steps
32	Bank Select LSB	00H (PRESET VOICE), 01H (CUSTOM VOICE)
64	Sustain	00H (off)...7FH
80	Foot Controller	00H (off), any other value (on)
122	Local Control	00H (off), any other value (on)
123	All Notes Off	00H
124	OMNI Mode Off	00H
125	OMNI Mode On	00H

* Pan, local control, all notes off, omni mode off, and omni mode on are not transmitted.

● PROGRAM CHANGE

DATA FORMAT: [CnH] -> [pp]

CnH = Program event [n = channel number)
pp = Program number (00 ... 99)

● PITCH BEND CHANGE

DATA FORMAT: [EnH] -> [LSB] -> [MSB]

EnH = Pitch bend event (n = channel number)

MSB	LSB	
01111111	01111111	: max
:	:	
01000000	00000000	: center
:	:	
00000000	00000000	: min

● TIMING CLOCK

DATA FORMAT: [F8H]

● START

DATA FORMAT: [FAH]

● STOP

DATA FORMAT: [FCH]

● ACTIVE SENSING

DATA FORMAT: [FEH]

● SYSTEM EXCLUSIVE MESSAGES

(1) BULK DUMP REQUEST (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
0010nnnn	2nH	Substatus/n : Device Number
00001010	0AH	Format Number
11110111	F7H	EOX

(2) BULK DUMP DATA

11110000	F0H	Status
01000011	43H	YAMAHA ID
0000nnnn	0nH	Substatus/n : Device Number
00001010	0AH	Format Number
0nnnnnnn	nn	Byte Count MSB
0nnnnnnn	nn	Byte Count LSB
01010000	50H	Header 'P
01001011	4BH	'K
00100000	20H	'space
00100000	20H	'space
00110010	32H	'2
00110001	32H	'2
00110010	34H	'4
00110101	30H	'0
00100000	20H	space
0nnnnnnn	nn	data number
0ddddddd	dd	
:	:	Data
0ddddddd	dd	
0sssssss	ss	Check-sum
11110111	F7H	EOX

• DATA NUMBER

00H	SYSTEM SET UP DATA
01H	VOICE REGISTRATION DATA
02H	PANEL REGISTRATION DATA
03H	PAD ASSIGN DATA
04H	CUSTOM VOICE DATA
05H...0CH	CUSTOM ACCOMPANIMENT DATA
0DH...1DH	SEQUENCER DATA

(3) PANEL DATA REQUEST (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
0010nnnn	2nH	Substatus/n : Device Number
01111100	7CH	Format Number
11110111	F7H	EOX

(4) PANEL DATA BULK DUMP

11110000	F0H	Status
01000011	43H	YAMAHA ID
0000nnnn	0nH	Substatus/n : Device Number
00001010	0AH	Format Number
0nnnnnnn	nn	Byte Count MSB
0nnnnnnn	nn	Byte Count LSB
01010000	50H	Header 'P
01001011	4BH	'K
00100000	20H	'space
00100000	20H	'space
00110010	32H	'2
00110001	32H	'2
00110010	34H	'4
00110101	30H	'0
00100000	20H	space
00100000	20H	space
0vvvvvvv	vv	Software Version Number
0rrrrrrr	rr	Software Revision Number
0ddddddd	dd	
:	:	Data
0ddddddd	dd	
0sssssss	ss	Check-sum
11110111	F7H	EOX

(5) NAME DATA REQUEST (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
0010nnnn	2nH	Substatus/n : Device Number
01111101	7DH	Format Number
11110111	F7H	EOX

(6) NAME DATA TRANSMISSION (Transmit only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
0000nnnn	0nH	Substatus/n : Device Number
01111101	7DH	Format Number
0nnnnnnn	nn	Byte Count MSB
0nnnnnnn	nn	Byte Count LSB
01010000	50H	Header 'P
01001011	4BH	'K
00100000	20H	'space
00100000	20H	'space
00110010	32H	'2
00110001	32H	'2
00110010	34H	'4
00110101	30H	'0
00100000	20H	space
00100000	20H	space
0vvvvvvv	vv	Software Version Number
0rrrrrrr	rr	Software Revision Number
0ccccccc	cc	
0ccccccc	cc	Condition Data
0ccccccc	cc	
0ccccccc	cc	
0sssssss	ss	Check-sum
11110111	F7H	EOX

(7) Remote Control Mode/Standard Voice Mode Switching

(7-1) REMOTE CONTROL MODE (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000101	05H	
00000000	00H	Remote Control Mode
11110111	F7H	EOX

(7-2) Standard Voice MODE (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000101	05H	
00000001	01H	Multi-timbre Mode
11110111	F7H	EOX

(8) CLOCK MODE CHANGE

(8-1) INTERNAL MODE (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110011	73H	Substatus. Section No. 3
00000001	01H	Product ID
00000010	02H	Internal Clock Mode
11110111	F7H	EOX

(8-2) EXTERNAL MODE (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110011	73H	Substatus. Section No. 3
00000001	01H	Product ID
00000011	03H	External Clock Mode
11110111	F7H	EOX

(9) CONTROL/PROGRAM CHANGE CANCEL (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110011	73H	Substatus. Section No. 3
00000001	01H	Product ID
00010000	10H	MIDI NON-SYNC MODE ON
11110111	F7H	EOX

(10) CONTROL CHANGE CANCEL (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000101	05H	
00000010	02H	Control Change Off
11110111	F7H	EOX

(11) CONTROL CHANGE ON (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000101	05H	
00000011	03H	Control Change On
11110111	F7H	EOX

(12) PROGRAM CHANGE CANCEL (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000101	05H	
00000100	04H	Program Change Off
11110111	F7H	EOX

(13) PROGRAM CHANGE ON (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000101	05H	
00000101	05H	Program Change On
11110111	F7H	EOX

(14) PITCH BEND CANCEL (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000101	05H	
00000110	06H	Pitch Bend Off
11110111	F7H	EOX

(15) PITCH BEND ON (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000101	05H	
00000111	07H	Pitch Bend On
11110111	F7H	EOX

(16) SYSTEM EXCLUSIVE CANCEL (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000101	05H	
00001000	08H	System Exclusive Off
11110111	F7H	EOX

(17) SYSTEM EXCLUSIVE ON (Receive only)

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000101	05H	
00001001	09H	System Exclusive On
11110111	F7H	EOX

* These commands are received even when system exlusive is cancelled.

● MIDI EXTENDED CONTROL CHANGE

(1) 1 BYTE DATA FORMAT

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus. Section No. 6
00000100	04H	
0gggnnnn	gn	n : Local Device Number
0ccccccc	cc	g + cc : Controller number
0ddddddd	dd	Data
11110111	F7H	EOX

(2) 1 BYTE DATA

g	cc	dd	Parameter
0	00h	0...43	RHYTHM STYLE No.
	01h	00h	ABC OFF
		01h	SINGLE FINGER
		02h	FINGERED CHORD
		03h	MANUAL BASS
	03h	00h	FILL IN OFF
		01h	INTRO./FILL1 ON
		02h	INTRO./FILL2 ON
	04h	0	INTRO./ENDING ON
	05h	0	SYNCHRO START ON
	0Bh	1	ORCHESTRA 1 ORCHESTRATION
		7	ORCHESTRA 1 + ORCHESTRA 2

	8	ORCHESTRA 2 ◂▸ ORCHESTRA 1
0Dh	4	KEY VELOCITY OFF
	5	KEY VELOCITY ON
11h	0...15	PANEL REGISTRATION A1...B8
12h	1	PAD CUSTOM 1
	2	PAD CUSTOM 2
	3	PAD CUSTOM 3
	6	SYNCHRO BREAK OFF
	7	SYNCHRO BREAK ON
17h	0...127	CHORD 1 VOLUME
18h	0...127	BASS VOLUME
19h	0...127	RHYTHM VOLUME
1Ch	0...127	ORCHESTRA 2 VOLUME
1Dh	0...127	CHORD 2 VOLUME
1Eh	0...127	EXP. PEDAL VALUE
1FH	0	VOICE PART SELECT ORCH.1
	1	VOICE PART SELECT ORCH.2
20h	0	HARMONY OFF
	1...16	HARMONY TYPE 1...16
21h	0	KEYBOARD PERC. OFF
	1	KEYBOARD PERC. ON
22h	0	DEMO OFF
	1	DEMO ON
23h	0...9	VOICE REGISTRATION 1...10
24h	0	IA OFF
	1	IA ON
	2	VERSE 1
	3	VERSE 2
	4	CHORUS 1
	5	CHORUS 2
	6	SOLO OFF
	7	SOLO ON
25h	0	EXIT
	1...13	FUNCTION 1...13
26h	0	SEQUENCER REPEAT OFF
	1	SEQUENCER REPEAT ON
	2	SEQUENCER EDIT OFF
	3	SEQUENCER EDIT ON
	4	SEQUENCER DELETE OFF
	5	SEQUENCER DELETE ON
	6	SEQUENCER FF OFF
	7	SEQUENCER FF ON
	8	SEQUENCER REW OFF
	9	SEQUENCER REW ON
	10	SEQUENCER TOP ON
	11	SEQUENCER RECORD OFF
	12	SEQUENCER RECORD ON
27h	0...7	SEQUENCER TRACK 1...8
28h	0	ORCH.2 HOLD OFF
	1	ORCH.2 HOLD ON
29h	0	LCD UP
	1	LCD DOWN
	2	LCD LEFT
	3	LCD RIGHT
2Ah	0	LCD SW 1 OFF
	1	LCD SW 1 ON
	2	LCD SW 2 OFF
	3	LCD SW 2 ON
	4	LCD SW 3 OFF
	5	LCD SW 3 ON
	6	LCD SW 4 OFF
	7	LCD SW 4 ON

(3) 2 BYTE DATA FORMAT

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus
		Section No.=6 (Portable Keyboard)
00000100	04H	
0gggnnnn	gn	n : Local Device Number
0ccccccc	cc	g + cc : Controller number
0ddddddd	dd	Data 1
0ddddddd	dd	Data 2
11110111	F7H	EOX

(4) 2 BYTE DATA

g	cc	dd1	dd2	Parameter
1	00h	40...280		TEMPO VALUE
	01h	0	0...127	PAD 1
		1	0...127	PAD 2
		2	0...127	PAD 3 dd2≠0 : ON
		3	0...127	PAD 4 dd2=0 : OFF
		4	0...127	PAD 5
		5	0...127	PAD 6
		6	0...127	PAD 7
		7	0...127	PAD 8
	02h	0	0...99	ORCH. 2 PRESET VOICE
		1	0...99	ORCH. 2 CUSTOM VOICE
	03h	0	0...99	MANUAL BASS PRESET VOICE
		1	0...99	MANUAL BASS CUSTOM VOICE

(5) 3 BYTE DATA FORMAT

11110000	F0H	Status
01000011	43H	YAMAHA ID
01110110	76H	Substatus
		Section No.=6 (Portable Keyboard)
00000100	04H	
0gggnnnn	gn	n : Local Device Number
0ccccccc	cc	g + cc : Controller number
0ddddddd	dd	Data 1
0ddddddd	dd	Data 2
0ddddddd	dd	Data 3
11110111	F7H	EOX

(6) 3 BYTE DATA

g	cc	dd1	dd2	dd3	Parameter
2	00h	0	0...24	0...9	RHYTHM Reverb
		1	0...24	0...9	ACCOMP. Reverb
		2	0...24	0...9	ORCHESTRA Reverb
2	01h	0	0...7	0...9	ACCOMP. Effect
		1	0...7	0...9	ORCHESTRA Effect

* dd2 : TYPE dd3 : DEPTH

SPECIFICATIONS / TECHNISCHE DATEN / SPECIFICATIONS / ESPECIFICACIONES

KEYBOARD :
76 Keys (E0~G6) with Touch Response

POLYPHONY :
40 notes max.

VOICES :
Preset 100 voices
Custom 100 voices (Programmable)

ACCOMPANIMENT :
INTERACTIVE ACCOMPANIMENT :
Preset 36 styles
Disk 8 styles
CUSTOM ACCOMPANIMENT :
6 styles (Programmable)

EFFECT :
Reverb based effect 25 types, other effect 8 types, Harmony 16 types

PERCUSSION :
Keyboard ; 74 (Percussion + Sound Effect)
Pad ; 8 (CUSTOM SET 1~3)

AUTO BASS CHORD :
Single Finger, Fingered Chord, Manual Bass

SEQUENCER :
8 Tracks, 1 Song

REGISTRATION :
VOICE REGISTRATION : 10
PANEL REGISTRATION : 16

DISPLAY :
LED, LCD

DISK DRIVE :
3.5" FDD, Compatibility with DOC (Yamaha Disk Orchestra Collection)

DEMONSTRATION :
2 Songs + Disk 5 Songs

CONNECTORS :
MIDI (IN, OUT, THRU), FOOT SW., SUSTAIN, EXP. PEDAL, HEADPHONES, OPTIONAL IN (L, R), AUX. OUT (L/L+R, R)

AMPLIFIER :
10W X 2

SPEAKERS :
16cm (6-5/16") X 2, 5cm (1-15/16") X 2

DIMENSIONS (W X D X H) :
1210mm (47-5/8") X 405mm (15-15/16") X 131.8mm (5-3/16")

WEIGHT :
24 kg (52.9lbs.)

SUPPLIED ACCESSORIES :
Music Stand, FC-5 Foot Switch, Sample Data Disk

OPTIONAL ACCESSORIES :
- HPE-5/HPE-3 Headphones
- L-5 Stand
- EP-1 Expression Pedal

* *Specifications subject to change without notice.*
* *Änderungen ohne Vorankündigung vorbehalten.*
* *Sous toute réserve de modification des caractéristiques sans préavis.*
* *Especificaciones sujetas a cambios sin previo aviso.*

YAMAHA [Portatone]
Model PSR-6700 MIDI Implementation Chart

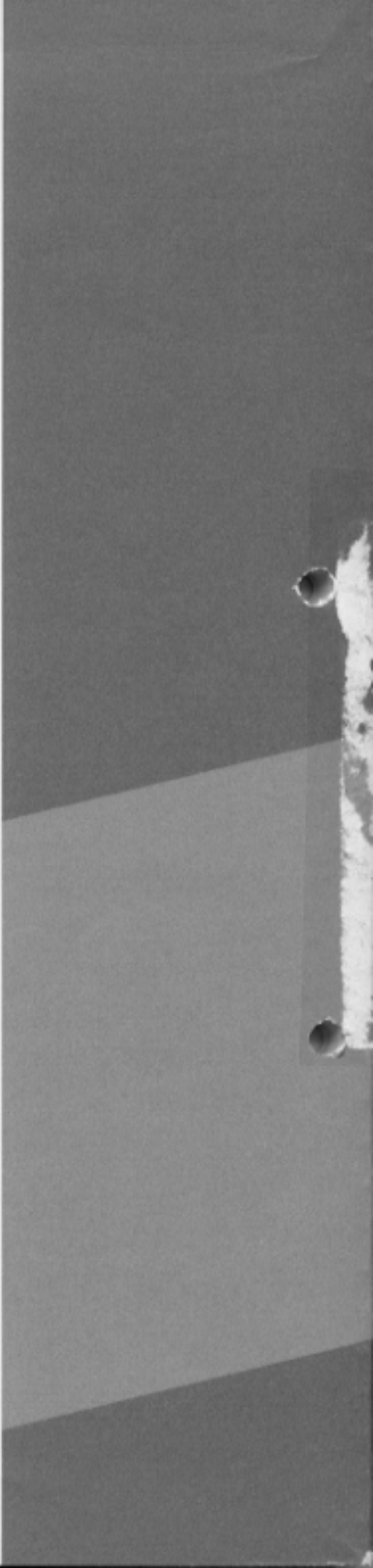
Date : 03/27 1991
Version : 1.0

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1-16	1-16	memorized
	Changed	1-16	1-16	
Mode	Default	3	1,3	memorized
	Messages	X	OMNI ON/OFF	
	Altered	**********	X	
Note Number		28-103	0-127	
	True voice	**********	22-109	
Velocity	Note on	O 9nH,v=1-127	O v=1-127	
	Note off	X 9nH,v=0	X	
After Touch	Key's	X	X	
	Ch's	X	X	
Pitch Bender		O	O 0-2 semi	7bit resolution
Control Change	0	O	O	Bank Select MSB
	1	O	O	Modulation
	7	O	O	Volume
	10	X	O	Pan
	32	O	O	Bank Select LSB
	64	O	O	Sustain
	80	O	O	Foot Controller
Program Change		O 0-99	O 0-99	
	True #	**********	0-99	
System Exclusive		O	O	
System Common	Song Pos	X	X	
	Song Sel	X	X	
	Tune	X	X	
System Real Time	Clock	O	O	
	Commands	O	O	
Aux Mes-sages	Local ON/OFF	X	O	
	All Notes OFF	X	O (122-125)	
	Active Sense	O	O	
	Reset	X	X	

Notes :

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO O : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO X : No

YAMAHA



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